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CONSTRUCTION.

THE Phoenixville and West Chester Railroad will be completed by January 1.

THE California Southern is completed to San Diego, 600 miles from San Francisco.

THE Wheeling and Lake Erie Railroad has been opened from Wheeling to Detroit.

THE through route of the Southern Pacific Railroad Company to New Orleans will be completed January 1, 1883.

THE last rail of the railroad extension from Goshen to Benton Harbor, on Lake Michigan, was laid on the 24th inst.

THE new track of the Fitchburg Railroad between Baldwinville and Royalston was used for the first time on the 25th inst.

THE track of the Chicago and Atlantic Railway has been completed between Lima and Decatur, Ind. The road is 269 miles in length.

THE City Council of Wilmington, Delaware, has granted the Baltimore and Ohio Railroad company the right of way through that city for its Philadelphia line.

THE Kingston and Pembroke Railway has been completed to within 15 miles of Renfrew; the terminus of the road will be finally completed in 12 months' time.

THE survey of the Pennsylvania company's Germantown and Chestnut Hill branch has been completed, and the company is preparing contracts for its construction.

J. L. Randolph, chief engineer of the Baltimore and Ohio Railroad, says that the extension through Delaware will be built by March, 1884, the time named in the charter.

THE double track line of the Lehigh Valley Railroad has been extended to Pittston, and the extension of new track between Wilkesbarre and that city was recently opened to traffic.

PLANS and specifications for the bridge of the Highland Junction Company across the Hudson River at Cornwall have been finished. The completion of this bridge will add the necessary link for an all-rail route from the coal fields of Pennsylvania to the East.

THE track of the Utah and Northern Railroad has reached Race Track Creek, eight miles from Deer Lodge. Work has been commenced on the bridge across Deer Lodge River within the city limits. The Oregon Short Line is completed to a point five miles west of Soda Springs, and track is being laid at the rate of one

mile per day. The gap to be completed before connections is made with the line of the Utah and Northern is expected to be filled in ten days. Work is also being vigorously prosecuted west of the Utah and Northern Line, and rapid progress is being made toward Wood River.

WORK is progressing upon the Coshocton extension of the Connonton Valley Railroad, which will probably be ready for trains December 1. The question of building to Zanesville is now under consideration, and there is talk of extending the road into the Hocking Valley, some thirty miles beyond Zanesville, where the best coal fields of the State are located.

INCORPORATION.

ARTICLES of incorporation have been filed in Little Rock, Ark., for the Dardanelle and Waldron Railway Company, with \$750,000 capital. The road will be seventy-five miles long.

ARTICLES of incorporation of the Galesburg and Northern Railroad, the narrow-gauge road that is to run from Galesburgh to Geneseo, have been filed at the county seat of Henry county, Ill. The incorporators are Messrs. Grant, Carpenter and Wyman, of Galesburg; A. R. Mock, of Cambridge, and Joseph M. Allen, William Irwin and Levi Watterman, of Geneseo. A survey of the road will be immediately begun under the charge of Engineer Wyman, and the road will be completed to Geneseo early next season.

ARTICLES of incorporation have been filed at Albany, N. Y., of the following companies: The Olean and Salamanca Railroad Company; capital, \$700,000; to begin at a point on a line of the Buffalo, Pittsburg and Western Railroad, in Salamanca, and run thence in an easterly direction through the towns of Great Valley, Carrollton, Allegheny, and Olean, to a point on the Buffalo, New York and Philadelphia Railroad. The Niagara Falls and Suspension Bridge Railroad Company; capital, \$50,000; to run from the village of Niagara to Suspension Bridge. The Pennsylvania, Slatington and New England Railroad Company (New York Division); capital, \$250,000; to run from a point on the boundary line between the States of New York and New Jersey, where the route of the Pennsylvania, Slatington and New England Railroad, in the State of New Jersey, intersects the same; thence running in a north-easterly direction, and terminating at Pine Island, in the County of Orange, State of New

York; the length of the road is to be five miles. The News and Stock Telegraph Company of New York; capital, \$600,000, with the privilege of increasing to \$2,000,000. The line is to run through the United States, Canada and Mexico.

PERSONAL.

J. L. BUTMAN has been appointed superintendent of the Boston, Hoosac Tunnel and Western Railway, with jurisdiction over the entire line.

A. W. HILL has been appointed secretary and treasurer of the Atlanta and West Point Railroad Company, in place of D. W. Appler, resigned.

THE President has appointed Edward P. Ferry, of Utah, to be a Government Director of the Union Pacific Railroad, in place of Robert H. Baker, deceased.

ROBERT H. SAYER, chief engineer and general superintendent of the Lehigh Valley Railroad, has resigned that position, to take effect November 1, or as soon thereafter as practicable. He has been connected with the road for thirty years.

GENERAL E. P. ALEXANDER has resigned from the directory of the Georgia Railroad Company on account of his being president of the Central Railroad Company of Georgia, and State Treasurer Speer has been elected to fill the vacancy.

On the 1st of January George C. Thomas and Edward T. Stotesburg, will be admitted into the firm of A. J. Drexel & Co., of Philadelphia. Mr. Godfrey, a partner in the firm, will take charge of the house of A. J. Drexel & Co., in this city.

THOMAS HASSARD, of the Railroad Office of the Interior Department, has been appointed Commissioner to examine and report upon the completed section of the New Orleans Pacific Railway, extending from New Orleans to Shreveport, La., where it connects with the mainline of the Texas and Pacific Railway.

G. H. KIMBALL has been appointed superintendent of the Eastern Division of the New York, Chicago and St. Louis Railway, which extends from Buffalo to Bellevue, and E. E. Dwight, superintendent of the Western Division, which extends from Bellevue to Chicago. Mr. Kimball's headquarters will be in Cleveland, and Mr. Dwight's in Chicago.

Louisville and Nashville Railroad.

The earnings of the Louisville and Nashville Railroad for the year ending June 30, 1882, were as follows:

Main Stem	\$2,946,424 64
Bardstown Branch	24,754 77
Lebanon-Knoxville Branch	385,141 24
Richmond Branch	45,790 54
Cecilian Branch	45,833 60
Memphis Division	1,042,008 59
Evansville, Henderson and Nashville Division	1,101,135 22
Southeast and St. Louis Railway	836,523 72
New Orleans and Mobile Railroad	909,860 29
Pontchartrain Railroad	14,396 08
Nashville and Decatur Railroad	1,101,688 99
South and North Alabama Railroad	1,311,253 53
Mobile and Montgomery Railway	937,354 39
Pensacola Division	180,834 33
Pensacola and Selma Division	60,998 01
Selma Division Western Railroad of Alabama	100,265 43
Cumberland and Ohio Railroad—Southern Division	42,978 72
Glasgow Branch Railroad	20,013 80
Cincinnati Division	574,330 96
Lexington Branch	227,769 45
Shelbyville Branch	30,977 15
Cumberland and Ohio Railroad—Northern Division	13,312 36
Louisville Railroad Transfer Co	74,981 99
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge	7,026 85
	\$11,987,744 55

Operating expenses, viz.:

Main Stem	\$1,278,432 26
Bardstown Branch	19,010 16
Lebanon-Knoxville Branch	206,190 22
Richmond Branch	31,827 38
Cecilian Branch	35,620 79
Memphis Division	793,793 70
Evansville, Henderson and Nashville Division	613,790 16
Southeast and St. Louis Railway	617,731 21
New Orleans and Mobile Railroad	534,146 62
Pontchartrain Railroad	21,115 78
Nashville and Decatur R. R.	656,679 75
South and North Alabama R.R.	905,149 61
Mobile and Montgomery Railroad	693,257 27
Pensacola Division	145,490 76
Pensacola and Selma Division	88,941 85
Selma Division Western Railroad of Alabama	81,805 08
Cumberland and Ohio R. R.—Southern Division	25,183 51
Glasgow Branch Railroad	13,583 26
Cincinnati Division	437,004 86
Lexington Branch	118,973 59
Shelbyville Branch	32,197 53
Cumberland and Ohio Railroad—Northern Division	19,591 65
Louisville Railroad Transfer Co	39,607 33
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge	14,156 02
	7,429,370 35

Net earnings:

Main Stem	\$1,667,992 38
Bardstown Branch	5,744 61
Lebanon-Knoxville Branch	178,950 92
Richmond Branch	13,063 16
Cecilian Branch	10,212 81
Memphis Division	302,214 89
Evansville, Henderson and Nashville Division	487,345 06
Southeast and St. Louis Railway	220,793 51
New Orleans and Mobile R. R.	375,713 67
Pontchartrain Railroad—Loss	6,719 70
Nashville and Decatur R. R.	344,929 24
South and North Alabama R. R.	346,103 92
Mobile and Montgomery Railroad—Loss	294,277 12
Pensacola Division	35,343 57
Pensacola and Selma Division—Loss	27,943 84
Selma Division Western Railroad of Alabama	18,370 35
Cumberland and Ohio Railroad—Southern Division	17,795 21
Glasgow Branch Railroad	6,430 54
Cincinnati Division	137,316 10
Lexington Branch	108,795 86
Shelbyville Branch—Loss	1,220 38
Cumberland and Ohio Railroad—Northern Division—Loss	6,279 29
Louisville Railroad Transfer Co	35,374 66
Louisville, Harrod's Creek and Westport Railroad, Narrow Gauge—Loss	7,129 17
	\$4,558,374 20

The following statements will show the source

from which the above earnings were derived, together with a comparison of the same with those of the preceding year:

Freight	\$7,407,402 78	\$8,050,339 04
Passengers	2,599,353 20	3,007,484 74
Mails	254,886 60	280,806 71
Express	194,185 77	246,216 97
Train privileges	7,420 20	8,338 20
Rent of engines	118,913 06	134,164 30
Rent of passenger cars	59,438 11	41,462 11
Rent of sleeping-cars	4,709 92	1,500 50
Rent of freight cars	205,187 66	153,298 79
Detention of cars, storage, etc.	568 45	1,587 03
Pig iron storage	1,354 17	3,516 50
Rents	32,056 13	32,478 63
Profits on Commissary Department	22,906 35	26,160 10
Wharfage and storage	2,707 19	1,999 44
Earnings of steamer Mobile	501 05	.....
Total gross earnings	\$10,911,650 63	\$11,987,744 55
Expenses, as above	6,713,132 31	7,429,370 35
Net earnings from traffic	\$4,198,518 32	\$4,558,374 20
Realized from investments	225,209 17	266,442 35
Total credited to Income account	\$4,423,727 49	\$4,824,816 55
The charges against income in 1881-82 are:		
Interest, rentals, taxes, etc.	\$4,035,908 78	
Georgia Railroad lease deficit	110,000 00	
	4,145,908 78	
Net income		\$678,907 77
Dividend payable February 10, 1882, 3 per cent		543,900 00
Net surplus for the year		\$135,007 77

The net results of the year did not come up to the expectations based on the first six months, which justified a dividend of 3 per cent. The fixed charges of the last half year were larger by \$260,000 than for the first half, consequent on the additions made to the property to increase its earning capacity. In the spring of 1881 much business had been lost for want of adequate equipment; and, in view of that fact, the equipment was largely increased, especially during the months of December, 1881, and January, February and March, 1882. The expenditure by this company of \$110,000 for betterments of the Georgia Railroad in excess of the revenue derived from its one-half interest in the lease it was believed would increase the earning capacity of the road, and would return to this company the money so expended. The amount has been charged to income account, and when reimbursed will be placed to the credit of that account for the year in which it is refunded.

A further analysis of the report shows that the earnings of the main stem were from freight \$1,962,950.38, passengers \$529,297.83, mails \$56,139.14, express \$59,648.41, miscellaneous \$338,388.88; of the Bardstown Branch—from freight \$14,105.32, passengers \$9,062.49, mail \$768.42, express \$656.46, miscellaneous \$161.86; Knoxville Branch—from freight \$271,322.97, passengers \$98,608.83, mail \$6,785.86, express \$6,867.73, miscellaneous \$1,555.75; Richmond Branch—from freight \$27,396.79, passengers \$15,448.74, mail \$2,105.12, express \$670.61, miscellaneous \$169.28; Cecilian Branch—from freight \$18,226.50, passengers \$22,802.13 mail \$2,245.53, express \$2,484.44, miscel. \$75; Memphis Line—from freight \$605,696.35, passengers \$348,543, mail \$56,953.84, express \$28,204.32, miscellaneous \$2,610.73; Evansville, Henderson and Nashville Division—from freight \$900,242.48, passengers \$180,027.08, mail \$10,123.69, express \$9,495.09, miscellaneous \$1,246.88; St. Louis Division—from freight \$573,418.24, pas-

sengers \$228,827.03, mail \$15,336.60, express \$18,097.96, miscellaneous \$2,843.89; New Orleans and Mobile Railroad—from freight \$849,437.94, passengers \$359,983.30, mail \$30,351.13, express \$17,824.64, miscellaneous \$12,273.28; Pontchartrain Railroad—from freight \$2,393.62, passengers \$11,902.10, miscellaneous \$100.36; Nashville and Decatur Division—from freight \$771,184.84, passengers \$194,467.84, mail \$14,270.24, express \$14,779.76, miscellaneous \$6,906.26; South and North Alabama Railroad—from freight \$998,641.45, passengers \$254,114.91, mail \$11,341.52, express \$17,208.25, miscellaneous \$29,947.40; Mobile and Montgomery Railroad—from freight \$619,294.95, passengers \$309,160.27, mail \$33,970.01, express \$22,887.51, miscellaneous \$2,221.65; Cumberland and Ohio, Southern Division—from freight \$29,328.45, passengers \$11,547.52, mail \$1,368, express \$720.25, miscellaneous \$14.50; Glasgow Railroad—from freight \$12,685.33, passengers \$6,392.80, mail \$518.52, express \$356.15, miscellaneous \$61; Pensacola Railroad—from freight \$120,418.72, passengers \$53,608.36, mail \$1,922.03, express \$2,800.78, miscellaneous \$2,084.44; Pensacola and Selma Railroad—from freight \$47,655.21, passengers \$10,944.01, mail \$1,746.24, express \$516.28, miscellaneous \$136.27; Selma Division—from freight \$48,975.87, passengers \$46,631.68, mails \$3,235.71, express \$1,299.17, miscellaneous \$123; Cincinnati Division—from freight \$319,483.76, passengers \$199,005.02, mail \$25,312.86, express \$29,072.74, miscellaneous \$1,446.58; Lexington Branch—from freight \$122,315.19, passengers \$90,192.43, mail \$3,777.64, express \$10,949.14, miscellaneous \$535; Shelby Branch—from freight \$17,011.38, passengers \$12,281.05, mail \$564.46, express \$1,110.38, miscellaneous \$9.88; Cumberland and Ohio, Northern Division—from freight \$6,009.46, passengers \$5,831.13, mail \$902.87, express \$566.90, miscellaneous \$2; Railway Transfer—from freight \$69,504.55, passengers \$4,673.56, mail \$803.88; Narrow-Gauge Railroad—from freight \$2,649.25, passengers \$4,111.27, mail \$263.18, miscellaneous \$3.15—total, as above, \$11,987,744.55.

The aggregate length of the roads operated by this company June 30, 1881, was 1,872 miles. On the 1st of July 1881, the Owensboro and Nashville Railway (35 miles), which had previously been operated as a part of the Louisville and Nashville system, was turned over to and is now operated by the Owensboro and Nashville Railway Co. In July, 1881, the company purchased the capital stock of the Louisville, Cincinnati and Lexington Railway Co., and on the 1st of November, 1881, the road and property with its leased roads (in all 237 miles) was incorporated into the Louisville and Nashville system. On the 1st of January, 1882, the Cecilian Branch (from Louisville south, 46 miles), was leased to the Chesapeake, Ohio and Southwestern Railway Co. for 99 years, at an annual rent of \$60,000, with the privilege to that company of purchasing at \$1,000,000—making the length of road operated by this company June 30, 1882, as follows: owned in fee, or through the ownership of the entire capital stock, 1,577.95 miles; operated under lease, 261.17 miles; operated for the South and North Alabama Railroad Co., (being the owner of a majority of its

capital stock) the North and South Alabama Railroad, 188.88 miles—a total of 2,028 miles. It will be seen that for the first four months of the fiscal year the company operated 1,835 miles of road, for the next two months 2,074 miles, and for the last six months 2,028 miles, making the average operated for the year 1,971 miles. The gross earnings per mile were \$5,930.24, the operating expenses \$3,648.44, and the net earnings \$2,281.80. The ratio of operating expenses was 61.97 against 61.52 for the preceding year. The report says:

LEBANON-KNOXVILLE BRANCH.

It is expected that the extension of this branch to the Tennessee State line will be completed, and open for traffic, during the month of December. The road has been built first-class in all respects, and is now in operation to London, 18 miles from Livingston, the former terminus. Almost the entire grading is done, and the iron bridge structures have been gotten out. But little of the masonry work remains to be done. The road will be opened to Williamsburg, at the crossing of the Cumberland River, 48 miles from Livingston, about the middle of October. The length of the extension, when completed, will be 62 miles.

HENDERSON BRIDGE.

But little work has been done on this bridge, the amount expended to June 30, 1882, being \$6,161.19.

MADISONVILLE BRANCH.

The grading on this branch from Madisonville to Providence, sixteen miles, is completed, and ten miles of road finished and opened for business. Track-laying on the remaining six miles will be finished, and the branch opened for traffic the 1st of October.

PENSACOLA AND ATLANTIC RAILROAD.

The construction of the Pensacola and Atlantic Railroad has progressed rapidly. This road is to connect the Louisville and Nashville system of roads at Pensacola with the railroads of Florida and the South Atlantic coast. Over forty miles of the road are completed and ready for business. By the middle of October one hundred miles will be in operation, and the entire line is to be finished by the 1st of January, 1883.

GEORGIA RAILROAD.

The lease of the Georgia Railroad, in which this company is jointly interested with the Central Railroad Company of Georgia, has, as stated in the earlier part of this report, involved an outlay on the part of this company of \$110,000 for the year. In this connection the following extracts from the report of the general manager of that road will be of interest:

"While the result of operations has not been as satisfactory as was expected, there is nothing to excite distrust in the future. The Georgia Railroad derives about sixty per cent of its revenue from local sources. The country tributary to its line show signs of healthy growth, and the reflex can not be otherwise than happy. The expenses for the year just closed have been unusually heavy. The exhibit submitted shows that expenditures of every description, other than for account of the 'Athens Extension,' have been charged to operating expenses. The value of improvements, or rather betterments, made during the year amount to \$207,370.67. This sum, plus the cash value of material on hand, increases the amount to \$365,395.87. If the value of additions made and material on hand be considered proper assets, the result of operations for the year just closed will show a profit on the lease instead of an apparent loss."

CONSTRUCTION AND EQUIPMENT.

Besides the amounts expended in the purchase of the Louisville, Cincinnati and Lexington Railway and the construction of the Lebanon-Knoxville Branch extension and the Madisonville Branch, large expenditures have been

made during the year for steel rails, locomotive-engines, freight cars, passenger coaches, depots, wharves, terminal facilities, etc.

In conclusion, it is gratifying to the Board of Directors to be able to state that all the roads in our system are materially improved in physical condition and well supplied with rolling-stock and all necessary appliances for the transaction of a large business in the future. The stockholders should, however, remember that when the large purchases of the railroads and capital stock of other companies were made in 1879, 1880 and 1881, this company had but little cash capital, and the purchases were hence made on credit, the roads purchased being at the time in bad condition; and that to pay for the property purchased and to put the roads in proper shape for active business necessarily required large outlays of money. But in view of the growing prosperity of the country at large, and especially of the rapid development of the vast resources, mineral and agricultural, of the country through which our lines and their connections immediately pass, we are confident of a successful future for our company; and for the profitable results of the fiscal year 1882-'83 we have abundant promise in the excellent crops, especially in the Southern country, where our interest chiefly lie.

In addition to the 2,028 miles of road operated by this company, it is also interested, as owner of a majority of the capital stock of the company operating, outside of its own system, in the Nashville, Chattanooga and St. Louis Railway, 521 miles, and the Owensboro and Nashville Railway, 43 miles; and as joint lessee with the Central Railroad Company of Georgia, of the Georgia Railroad and dependencies, 641 miles.

At the commencement of the year the company had 311 locomotives; during the year 69 were added, and 13 disposed of—leaving at the close of the year 367. The average number on all divisions during the year was 368, and the average mileage of each 28,051 miles. The total mileage over all divisions was 10,322,860, and the total cost of repairs \$376,041.46, or an average of 3.643 cents, as against 4.799 cents for the preceding year.

The company also had at the close of the year 186 passenger, 3 parlor, 53 baggage, 20 express, 12 postal, 1 president's, 1 directors', 1 general manager's, 4 pay, and 11,034 freight, etc., cars; and on the Narrow-Gauge Railroad 3 passenger, 2 excursion, 1 combination, and 32 freight, etc., cars. The freight car mileage was 81,561,355, passenger car mileage 11,369,383, sleepers 1,017,681. Number of passengers carried one mile, 111,137,575; tons of freight carried one mile, 569,639,434.

The capital stock of the company June 30, 1881, was \$18,130,913.17, and June 30, 1882, \$18,133,513.17, the increase of \$2,600 resulting from the exchange for stock in the Memphis and Ohio Railroad Co., and the stock is still liable to a further small increase from that source.

The mortgage debt of the company June 30, 1881, was \$46,991,840. During the year \$10,000,000 Trust bonds (of March 1, 1882), \$3,208,000 Louisville, Cincinnati and Lexington Railway General mortgage bonds, and \$1,000,000 New Orleans and Mobile Division second mortgage bonds were issued, and \$2,900,000 first and \$892,000 second mortgage bonds of the Louisville, Cincinnati and Lexington Railway assumed; in addition to which \$2,000,000 car trust certificates of the Louisville and Nash-

ville Railroad and \$123,948 car liens of the Louisville, Cincinnati and Lexington Railway were created—a total addition to the bonded indebtedness of the company of \$20,123,948. During the same time \$10,000 mortgage on main office, \$32,010 Memphis, Clarksville and Louisville bonds, and \$3,000,000 New Orleans, Mobile and Texas debentures were redeemed, and \$1,500,000 Lebanon-Knoxville branch bonds, \$1,248,000 Pensacola and Selma Division bonds and \$3,208,000 Louisville, Cincinnati and Lexington Railway bonds were pledged with trustees as security in part of the trust-bond issue of March 1, 1882—making a total of \$8,998,010 bonds retired, and leaving the bonded debt of the company June 30, 1882, \$58,117,778.

The \$1,000,000 New Orleans and Mobile 6 per cent second mortgage bonds were issued in lieu of \$3,000,000 debentures of the New Orleans, Mobile and Texas Railroad. The \$2,000,000 car trust certificates, bearing date April 1, 1882, and maturing from 1883 to 1889 were executed and given in payment for a large amount of rolling stock lately purchased by the company. They are payable in equal amounts semi-annually.

COST, RESOURCES AND LIABILITIES	
Cost of road to June 30, 1882.....	\$61,593,923 16
Resources:	
Due from transportation department.....	\$844,725 92
Bills receivable.....	603,112 04
Sundry railroads and persons	207,911 71
Real estate, quarry and timber lands.....	763,637 78
Sinking fund, Louisville, Cincinnati and Lexington Railroad.....	50,000 00
Bonds owned by the company.....	1,164,337 80
Stocks owned by the company.....	1,110,797 46
Lebanon-Knoxville Extension	1,114,040 91
Nashville and Decatur Railroad Co.....	504,121 43
South and North Alabama Railroad Co.....	1,276,040 96
Mobile and Montgomery Railroad Co.....	124,167 73
Owensboro and Nashville Railroad Co.....	303,014 32
Nashville and Florence Railroad Co.....	188,816 19
Henderson Bridge Co.....	60,161 19
Shop, road and fuel supplies.....	8,214,885 44
Cash.....	1,419,278 55
Cash balance due for trust funds.....	185,480 72
Car trust funds.....	1,054,036 73
Stocks and bonds held in trust.....	468,638 83
Total.....	82,464,121 23
Liabilities:	
Capital stock.....	\$18,133,513 17
Mortgage debt.....	58,117,778 00
Due sundry railroads and persons.....	\$827,242 15
Pensacola and Atlantic Railroad Co.....	1,205,706 82
Bills payable.....	592,728 52
Back dividends.....	36,876 93
Bills and pay-rolls unpaid.....	887,058 81
Interest due July 1 and August 1.....	430,715 99
Total, as above.....	\$82,464,121 23
President.—C. C. BALDWIN.	
Vice-President.—MILTON H. SMITH.	
Second Vice-President.—GEO. A. WASHINGTON.	
Directors.—C. C. Baldwin, John U. Brookman, Geo. C. Clark, C. H. Clark, F. D. Carley, T. W. Evans, E. H. Green, John E. Green, W. C. Hall, J. S. Rogers, Geo. A. Washington, W. S. Williams, Jas. T. Woodward.	
Secretary.—WILLIS RANNEY.	
Ass't Pres. and Ass't Sec'y.—A. M. QUARRIER.	
Gen'l Manager.—FRED. DE FUNIAC.	

AMERICAN Railroad Journal.

ESTABLISHED 1851.

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We invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, October 28, 1882.

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MATERIAL AND SOCIAL PROGRESS OF THE NORTH AMERICANS.

THE reading public at large has always evinced a certain interest in the views and opinions of European travelers who have visited the United States. We have had critics of all kinds, from Mrs. Trollope, Dickens, De Tocqueville and Lieber, down to the last actress, all of whose expressions have been received with more or less dissent. There is among us at the present time an observer of very different calibre from any of the foregoing. Mr. HERBERT SPENCER is a thinker par-excellence; and, as a student of sociology, biology, and the higher walks of philosophy, has perhaps no equal among living men and, without doubt, among the names of the past. Mr. SPENCER has been interviewed on the subject of the "Career of the American People." While he does not find everything rose-colored, he has forecast enough to discern the possibilities of great things for the population north of the Mexican line. The following is a summary of his conclusions:—

"The world has never before seen social phenomena at all comparable with those presented in the United States. A society spreading over enormous tracts, while still preserving its contiguity, is a new thing. This progressive incorporation of vast bodies of immigrants of various bloods has never occurred on such a scale before.

"Large empires composed of different peoples have on previous cases been formed by conquest and annexation. Then your immense system of railways and telegraphs tends to consolidate this vast aggregate of States in a way that no such aggregate has ever before been consolidated, and there are many minor co-operating causes, unlike those hitherto known. No one can say how it is all going to work out. That there will come hereafter troubles of various kinds, and very grave ones, seems highly probable; but all nations have had and will have troubles. Already you have triumphed over one great trouble, and may reasonably hope to triumph over others. It may, I think, be reasonably held that both because of its size and the heterogeneity of its contents the American Nation will be a long time in evolving its ultimate form, but that its ultimate form will be high. One great result is, I think, tolerably clear. From biological truths it is to be inferred that the eventual mixture of allied varieties of the Aryan race forming the population will produce a more powerful type of man than has hitherto existed, and a type of man more plastic, more adaptable, more capable of undergoing the modifications needful for complete social life. I think that whatever difficulties they may have to surmount, and whatever tribulations they may have to pass through, the Americans may reasonably look forward to a time when they will have produced a civilization grander than any the world has known."

Mr. SPENCER notes the fact that our scheme

of universal suffrage is not working as the ideal Constitution would seem to require. His disappointment in this respect seems to us founded on only a superficial acquaintance with the working of our institutions. There is, no doubt, a great and radical defect, at the present time, in the working of universal suffrage; but, like all other forms of government, it is an experiment which is being slowly worked out (evolved) to success, or failure. The letter and theory of our Constitution presuppose changes of this kind. It is open to amendments; and several have been incorporated into it within the first century, as fast as experience called for them. Doubtless the century upon which we have just entered will call for others, and so on to the end of time. In this sense our Constitution and our polity are more precisely a growth than the British Constitution with which he compares it. Monarchy is, by its very nature, based upon precedent, and is naturally averse to change. Not so with Republics; although it is historically true that the paper Constitution we started with was the work of idealists and reformers, it nevertheless had grasp enough upon the previous experience of mankind, and upon the wisdom which had descended from past ages, to be a practical working institution from the beginning, and is much more nearly adapted to the varying and changing wants of a complex population and a high culture than the English government, which takes on changes very slowly, and sometimes only at the brink of forcible revolution.

What Mr. SPENCER says of the amazing inventiveness and wonderful inheritance of our fertile soil and genial clime is something we ourselves are apt to overlook. He seems to be enthusiastic over the spread of our vast railroad system, the telegraph and telephone, and over our mechanical devices. These possessions, together with the innate invention and energy of the people, all contribute to a material prosperity the like of which has never been seen on the earth. In the long run we may expect to see the wealth and the exchanges of the world turning from western Europe to the American continent; and the opinion of an intelligent English critic is more valuable upon a matter of this kind, where the elements are visible and simple, than upon our party politics, only the surface of which is seen and read.

The largest steel spring ever made has just been successfully rolled at Kloman's Steel Works, Pittsburgh, Pa., for the United States Car Motor Company, of Philadelphia. The spring is 310 feet long, 6 inches wide, and one-quarter of an inch thick. It will be tempered and coiled by the motor company at their works in Philadelphia.

Manhattan Elevated Railway.

THE corrected traffic figures of the Manhattan Railway Company for the twelve months ending Sep. 30 show that during the year 86,361,029 paying passengers were carried over the line. This gives a monthly average of 7,196,769 and a weekly average of 1,660,789. Divide the year's traffic by days, and we have 237,253, which, if all the lines were operated continuously, day and night, would give an hourly average throughout the year of 9,869. But the lines are not all operated continuously, two of the four being closed at night and on Sundays; and then, too, the Elevated roads have their dull seasons and their busy ones, just as surface roads have. This is well illustrated in the reports for May and July. In the former month 7,920,875 passengers were carried, while in the latter there were but 6,637,137, a falling off of 1,283,738. Again, although the daily average for the year was 237,253, the days' traffic taken separately differ as widely as that of the months. The heaviest travel of a single day within the year just closed was on April 11, when the report shows 319,138. On December 31, 304,183 passengers were carried. On May 30, 296,808, and on December 23, 296,560.

But the distribution of the travel throughout the twenty-four hours of the day is of course still more uneven. As we have said, two of the four lines are closed at night (from 8 P. M. to 5:30 A. M.), and the two that are kept open have but few passengers after midnight. There are three hours in the morning and three in the evening known as "commission hours," when the fare is but five cents, and in these six hours sixty-five per cent of the entire traffic is handled. Taking the daily average then, as a basis of calculation, and dividing it according to this percentage, we have 154,212 as the average per diem for the six commission hours of nearly 26,000 an hour, and if we had any means of ascertaining the exact traffic per hour the results would show an average per hour between 6:30 and 7:30 A. M. and 5:30 and 6:30 P. M., fully double this. We know that these figures must strike many of our own citizens even, as fabulous, but they are compiled from the daily traffic slips of the company, and these are made up from the actual number of tickets collected from the canceling boxes.

The year's travel, divided by the mileage of the entire system, shows an average number of passengers per mile of 2,698,782 for the twelve months, a monthly average travel per mile of 258,232, and a daily average of 8,608. This of course was as unequally distributed as the hourly travel, but we have no means of computing it further. The traffic of the roads for the preceding year, which closed Sept. 30, 1881, was 75,575,245, and for the twelve months ending on the corresponding date, 1880, 60,831,759. The travel of the year just closed exceeds that of its immediate predecessor by 10,785,784, and that of 1880 by 26,529,270. If the business of the roads maintains anything like this percentage of growth for the next five years, the proposition to tax them on their gross earnings instead of as real estate, will not seem so "monstrously unjust," as some of our neighbors of the press considered it last winter.—*Elevated Railway Journal.*

Report of the Quarter-Master General.

THE report of the Quarter-master General of the Army, for the fiscal year ended June 30, 1882, which has just been submitted to the Secretary of War, states that the amount available during the year was \$13,628,681, the total disbursements were \$12,446,442, and the balance on hand at the close of the year \$1,182,239. The total cost of transportation during the year was \$2,762,052. In addition to the sum of \$1,187,401.70 for railroad transportation, it is estimated that there will be expended \$125,000 in the payment of 50 per centum of the earnings of land grant railroads, and the accounts now on file in the Quarter-master General's office indicate that the earnings of the bonded Pacific railroads for military transportation will amount to \$1,169,940.22, making the aggregate cost for railroad transportation during the year \$2,482,341.92. The total earnings of the Pacific railroads on account of military transportation since their first opening to June 30, 1882, is stated as follows: Union Pacific, \$7,357,402.40; Central Pacific, \$1,745,176.80; Kansas Pacific, \$2,386,222.61; Sioux City and Pacific, \$47,906.77; total, \$11,536,708.58. The \$300,000 appropriated March 3, 1879, for payments to certain land grant railroads on account of military transportation has been expended. Further action of Congress is required to make the money appropriated under the Act of August 5, 1882, available for the payments of accounts for services rendered by land grant railroads during the fiscal year ending June 30, 1881. Transportation accounts to the amount of \$1,511,629.40 are awaiting settlement. The amount due from certain Southern railroad companies for material purchased by them from the United States at the close of the war, not compromised or settled under special laws of Congress, and excluding sums declared due from two railroads declared insolvent, was, on July 12, 1881, \$1,106,434.55, upon which interest and charges have since accrued to the amount of \$42,461.96.

Railway Mail Service.

FROM the annual report of the General Superintendent of the Railway Mail Service we learn that on the 30th of June, 1882, there were in operation 769 railway post offices, conducted in 1,804 cars and apartments, and run over 87,865 miles of railroad, making 76,741,438 miles of annual service. There were in the service 3,670 postal clerks, with salaries aggregating \$3,486,779, or an average annual salary to each of \$976.68. This was an increase in number over those in the service at the close of the previous fiscal year of 393, or 12.37 per cent, and a decrease of \$1.85 per annum in the average salary paid to each. These figures represent the condition of the service on the 30th of June, but the actual expense during the year was \$3,235,853.12.

During the past year the railway postal clerks handled and distributed 2,155,213,880 letters and postal cards, and 1,278,176,600 pieces of other mail matter, or a total of all classes of ordinary mail matter of 3,433,390,480, besides 14,234,310 registered packages and 570,483 through registered pouches. This was an in-

crease over 1881 of 351,230,160 letters or 19.49 per cent, and of other mail matter of 228,880,250 or 21.82 per cent, and a total increase of all classes of mail matter of 580,110,410 or 20.33 per cent. The increase of registered packages and pouches handled over the number reported last year is 2,776,028 or 23.9 per cent.

During the past fiscal year there were 83 casualties, in which 3 railway postal clerks lost their lives, 16 were seriously and 20 were slightly wounded. During the past eight years 269 casualties have been reported, in which 19 employés of this service have been killed, 84 have been seriously and 77 slightly wounded.

The estimates for the next year are as follows: For railway postal clerks, \$3,977,120, an increase of 7.20 per cent over the appropriation for the present year; for post office cars, \$1,626,000, an increase of \$100,000 over this year, and for special facilities, \$600,000, the same as for the present year.

Marietta and Cincinnati Railroad.

THE foreclosure case of the Marietta and Cincinnati Railroad Company was heard by a full bench in the Ross county Court of Common Pleas at Chillicothe, Ohio, on the 23d inst. The Reorganization Committee was represented by Judge Ranney, of Cleveland; E. R. Bacon and MacGrane Coxe, of New York; the Baltimore and Ohio Railroad Company by John K. Cowen, of Baltimore; the Marietta and Cincinnati Railroad Company by General E. M. Johnson, of Cincinnati; the several trustees by Judges Harrison and Olds, of Cleveland, McClintock and Smith and others; and the Hillsboro and Cincinnati Railroad Company by Samuel R. Mathews, of Cincinnati. The report of Special Master Cook was presented and confirmed, showing that over 95 per cent in interest of the creditors and stockholders had executed the reorganization agreement and deposited their securities with the Farmers' Loan and Trust Company in New York. After a full hearing of all parties the Court decided that the decree of foreclosure be entered. The road will speedily be sold under this decree and purchased by a purchasing committee for the benefit of the creditors and stockholders under the plan of reorganization.

"HERE'S Webster on a bridge," said Mrs. Partington, as she handed to Ike a new unabridged dictionary. "Study it contentively, and you will gain a great deal of inflammation."

OUR advertising columns make an announcement which is of great importance, especially as supplementing an illustrated descriptive article printed in the last issue of this JOURNAL. The interest excited by that production makes the present the opportune time for directing the attention of readers to the fact that rights under patents covering the devices invented by George W. Hunt, of Philadelphia, for lighting the steps of cars or carriages can be procured immediately. Because these devices are of great value to the comfort and convenience of the public, and such as wide-awake railroad managers are sure to adopt, an early communication with Mr. Hunt is advised. His address is No. 216½ Walnut street, Philadelphia, Pa.

OUR CANADIAN LETTER.

[From our Special Correspondent.]

THE MANITOBA SOUTHWESTERN—GRAND TRUNK RAILWAY TEMPERANCE CIRCULAR—THE MONTREAL AND SOREL RAILWAY—IMPORTANT RAILWAY SUITS, &c., &c.

THE MANITOBA SOUTHWESTERN RAILWAY.

It is said that the Order-in-Council granting 6,400 acres per mile to the Manitoba Southwestern Railway will be revoked at the next meeting of the Privy Council after Sir Charles Tupper returns. The difficulty between the Hammond or *American Board* and the Shultz or *Canadian Board* precludes the possibility of the company carrying out its obligations to the government, and the urgent demands of the settlers occupying lands heretofore reserved for railway purposes. The government can no longer, without great injustice, hold over such lands. The even sections have all been occupied for some three years, and the squatters on the odd sections, or railway lands, are urging for title.

The forbearance of the government is remarkable, when it is taken into consideration that it is their policy to develop and settle the Northwest as rapidly as possible.

The withholding of such a large tract (of 2,000,000 acres) has attracted the attention of the opposition journals, who criticise the government severely for holding these lands over for the benefit of parties connected and interested in the Manitoba Southwestern Railway Company.

A RAILWAY TEMPERANCE CIRCULAR.

A circular has been issued by General Superintendent W. J. Spicer, to the Grand Trunk Railway employés, which clearly defines the position of the company in regard to intoxicating liquors. The company justly consider that a man who drinks is unfitted for a proper discharge of his duties, and incapable of filling positions of trust or to have human life under his care.

The company are determined to stamp out the liquor evil under their jurisdiction, and in this good work they will have the co-operation of all. The company will have no drinking men in its service, and those continuing in the practice will be dismissed. Mr. Spicer is the only railway manager who has steadily pursued the policy embodied in his circular, and no one has had more painful experience. A kind, generous man, he has been compelled in the interest of the public to discharge men addicted to drink—good men otherwise, men of families, who have been repeatedly cautioned, but who would continue to relapse into their old habits. Mr. Spicer concludes his circular with the following good counsel :

"This kind of work won't do; the habit of drinking had better be given up at once and altogether, or it will inevitably result in dismissal and trouble for all concerned. Your only safety lies in total abstinence. I strongly advise you to practice and adhere to it, and to use all your influence with others in the same safe direction. Save your money, benefit your families, insure safe working, do not risk your

own lives or the public safety by tolerating as fellow-employés men who occasionally get into a muddled or worse condition by indulging in drinking habits, which lead to carelessness, recklessness, accidents, and a sad list of troubles which we must all desire to prevent."

The wood supply along the Pembroke and Kingston Railway has given out owing to the scarcity of choppers, so the company have decided to use coal in their engines.

THE MONTREAL AND SOREL RAILWAY.

A gentleman connected with this railway informed me some weeks since that the Messrs. Armstrong had leased the Montreal and Sorel to the Grand Trunk, hence the announcement in these columns. It now seems that some disagreement arose just previous to concluding the final agreement, although the preliminaries had been signed. The announcement is now made that the Southeastern has leased the Montreal and Sorel for twenty-one years, the contract provides for the immediate continuation of the road from Sorel to Levis (opposite Quebec City) and from St. Lambert to Rouses Point and Dundee. This will give a connection with the Delaware and Hudson for New York at Rouses Point, and at St. Lambert with Boston and Portland via the Southeastern, at Levis with the Intercolonial, at Potsdam Junction via Dundee with the Western Railway System. The contract gives the Southeastern 40 per cent. of the gross earnings.

MARITIME PROVINCE NOTES.

Grand Southern Extension.—An engineering party have of late been surveying for the extension of this line from near the present terminus, up in the rear of St. Stephen, thence to the Union Mills and on to Milltown, where the road is to cross the St. Croix River into Maine and onward.

The potato crop of Prince Edward Island is estimated at 3,000,000 bushels, of which 2,000,000 bushels will be for sale. The farmers expect about twenty-five cents per bushel all around.

Halifax brewers have raised the price of beer.

Mr. Ketchum reports good progress in the Chignecto Marine Railway survey.

The herring fishing fleet from St. John's, N. B., and other maritime ports has been increased by new vessels. Most of the fishing heretofore has been carried on in open boats, but for better protection larger craft are being used. The bounty given by the Dominion Government last session has much to do with the present boom in building and buying vessels for the business.

IMPORTANT RAILWAY SUIT.

The Queen vs. Helliwell and others.—This is an appeal case from the Exchequer Court, and will be argued before the Supreme Court during the present session. The facts are: In the Fall of 1880 a train was thrown from the track on the Prince Edward Island Railway, owned by the Dominion Government, resulting in a number of passengers being seriously injured, some for life. It was alleged that the accident was owing to the bad state of the road, and several of the injured passengers took action against the Dominion Government, holding them responsible. Petitions of right were filed in each case and during last summer Justice

William A. Henry proceeded to Prince Edward Island to hear the evidence in the case. Shortly after returning to the Capital he delivered judgment in favor of suppliants, awarding them a considerable sum in way of damages.

Thursday last at Toronto, on the application of the Ontario and Quebec Railway Company, the Chancellor granted an injunction till Tuesday next to restrain the Central Railway Company from crossing or interfering in any way with the tracks of the Ontario and Quebec road.

INDUSTRIAL NOTES.

The cheese factories at Belleville are contracting at 10½c for August, and 11c for the last three months.

The Woodstock cheese market last week offered at 10c and 10½c. The holders of September and October are holding over for an advance, especially as the American markets quote 12c as the ruling price.

St. Thomas, Ontario, is very actively engaged in the bonus question and establishing manufacturing industries. The City Council have passed resolutions to submit by-laws to the rate payers, granting \$10,000 to the Cochrane Manufacturing Company, and a like sum to two other factories on certain conditions.

Ontario brewers have raised the price of ale. Owing to the scarcity of hands, England is called upon for assistance. One hundred English navvies arrived here last week to work on the Canada Pacific Railway.

NORTH WESTERN NOTES.

Winnipeg has introduced electricity in lighting up her main street.

The municipality of St. Andrews have granted a bonus of \$35,000 to the Canada Pacific for the Selkirk branch.

Goods arrived at Winnipeg from Toronto over Canadian Pacific Railway via Thunder Bay.

The Dominion Government will have under consideration the improvement of the Red River of Manitoba, by a short canal and the construction of several locks, etc.

The Superintendent of Government Telegraph, Mr. F. N. Gisborne, is preparing a new series of maps showing the government and other telegraph lines.

The goods lately seized at Montreal by the Customs Department, the property of the Nippon Mercantile Co., have been released. Five per cent was added to the valuation of the goods.

The Bank of Montreal Directors to-day (Oct. 24) declared a half-yearly dividend of five per cent.

The stock market was weaker and lower this morning.

Quebec Provincial Treasurer Wuertele has entered suit against the G. T. Railway, Canada Pacific, South Eastern and Montreal, Portland and Boston railway companies, to recover a provincial tax which these companies refuse to pay until a test case is tried.

"W."

OTTAWA, Oct. 24, 1882.

At a meeting of the stockholders of the Richmond and Danville Railroad held on the 20th inst., Robert Harris, J. A. Rutherford and M. Mayard Brown were elected directors.

OUR BOSTON LETTER.

[From Our Special Correspondent.]

THE BOSTON, REVERE BEACH AND LYNN R. R.
The present war between the Eastern Railroad and the Boston, Revere Beach and Lynn has excited considerable interest in the latter road, which led the JOURNAL man to think that a few facts about it would be attractive to your readers, as it is a local road that is comparatively unknown to a great many. It is now and always has been a well-managed corporation, and has been called by many the model narrow gauge. It runs from East Boston to Lynn, along the crest of Revere Beach just out of reach of the waves, and its length is 8.80 miles. It reaches Boston proper by means of ferry-boats, which it operates. The sail across the harbor on one of these is very pleasing, and they make close connection with all trains. The road is a 3ft. gauge and its newest passenger cars are 60 feet long and 9 feet wide, making them nearly as commodious as those of a standard gauge road. The great width gives a 3 foot overhang of the car outside the trucks on each side, which might be bad on a road where there were many curves, and trains were run at a high rate of speed, but here they do very well. This road covers a number of fine beaches, including the well-known Point of Pines, and during the summer does a large business, while in the winter it has a steady and well-paying traffic between Boston and Lynn. Competition between it and the Eastern has always been brisk, especially since the latter built a spur track to the Point of Pines, to which both roads take large numbers of people in the season. During the last fiscal year, ending September 30, 1882, the Boston-Revere Beach and Lynn carried 30,231 persons between Boston and Lynn, at 25 cents each. Its total number of passengers carried one mile for that year aggregate 6,581,104, from which revenues were obtained amounting to \$159,319.77, which with some other sources of income amounted to 164,388.52. Total operating expenses and taxes amounted to \$117,033.40. After deducting this from the above we find a net income of \$47,355.12, from which 6 per cent dividend was paid. They do no freight business excepting in hotel supplies, and their equipment consists 8 or 9 locomotives and about 40 passenger cars. The unfortunate war now prevailing between this road and its bigger rival, the Eastern, was caused by the narrow gauge under-selling its season tickets from Lynn to Boston. A pooling arrangement has heretofore kept them peaceable, but that expired this last summer by limitation, and feelings between the two, which had long been strained, have now burst into flame.

On October 2 the fare from Boston to Lynn was reduced to 5 cents each way by the Eastern, which was quickly followed by the narrow gauge, and from that time to the present that low price has prevailed, even the printing of ticket, being abolished by both roads to save expense. The Boston, Revere Beach and Lynn people said that if they could obtain patronage enough they would run 5-cent fares all winter; and for a few days it looked as if it could make to pay, 8,000 to 10,000 people being carried in

a day and the first Sunday of low fares this road carried 24,000 people, and the Eastern about 15,000. The regular city terminus of the latter is on Causeway street, but the trains engaged in this fight run from their freight-yard at East Boston, the road being obliged, in order to keep up with its competitor, to present its patrons with a ferry ticket at a cost to them of one cent each, thus reducing their net fare to 4 cent for nearly a 9-mile ride, 12 trains per day being run. The total first week's passengers of the narrow gauge footed up to 80,000. How long this state of affairs will last is a question. Even if the receipts do pay expenses, the wear and tear of such crowds on the rolling-stock and track is heavy. The good people of Lynn are much disturbed about it, as on the one hand it brings undesirable crowds, and on the other everybody goes to Boston to do their purchasing, and the storekeepers grumble. They have even gone so far as to petition the Railroad Commissioners to raise the fare; and as several conferences of the directors of the roads, making propositions, have been held, it is probable that the war will soon end. At all events, but a small proportion of the people get any benefit from it.

CINDERS.

Dudley's dynograph and track inspecting car was in the Eastern Railroad yard not long since, preparatory to making a trip over that road. It is a wonderful invention, and can, while running at 15 to 20 miles per hour, discover and mark all defects in the track so that a track-walker can find them. It also shows all irregularities of the rail, bad frogs, and other defects. It weighs 26 tons. One end of it is fitted up as a living apartment. Mr. Dudley had just come from an inspection trip over the Boston and Albany, which stands high in the list of well-laid roads.

The Massachusetts Central Railroad is still full of troubles, and is at present selling all superfluous rails and ties to raise money to meet pressing debts. Meanwhile many schemes for its salvation are afloat, but none of them appear to have any ready money in them.

The Eastern Railroad carried, during the year ending September 30, 1882, \$312,066.88 more than during the previous fiscal year. This company has lately purchased three new freight and one new passenger locomotives. It cannot be said that the Railroad Commissioners of this State do not earn their money, as no sooner is one accident investigated than another occurs. At present they are working evenings.

The Boston and Albany Railroad has just turned two handsome and light parlor cars out of their Allston shops. They are for the New York express train.

The New York and Boston Inland Railroad, which has been "not dead but sleeping," has been heard from lately by a petition for a certificate of incorporation to the Railroad Commissioners. After another exhaustive hearing, they were again informed that \$36,000 was not enough to build a million and a half dollar railroad with, and that until they had more "back-bone" i. e. money, they could not have a certificate, and the petitioners departed sadder but wiser.

A fire alarm occurring near the writer on the street, the other day, he soon found himself mixed up in a crowd. Presently he met a partially inebriated individual who was considerably jostled by hurrying people. As he passed, he was heard to mutter, "These fire engines-a-s-getting a-bad ze police, there's-a-s-many of 'em."

A Boston and Maine Railroad official told the JOURNAL man, the other day, that his road had done the largest passenger business for many years, during the last summer. This road has always been well managed. The Superintendent, Mr. J. T. Furber, makes it his boast that he can fill any man's place on the road, he having worked up through all departments. The road is now building 100 box freight cars and 100 flat cars; also a number of dump cars. A new freight locomotive and one new passenger engine have just been added, and another is to be built, shortly, of the double-end pattern.

Trains leaving from the Boston and Albany or the New York and New England railroad depots are started by an electric clock which can be set to strike at any hour of the day or night. By means of this, the conductor is prevented from holding the train a minute over to wait for his best girl to get on board.

Mr. Albert Fink has been in town, the past week, settling the price the Albany Railroad shall pay for the Woonsocket Division of the New York and New England Railroad. This acquisition will be used chiefly by the Newton Circuit Railroad, which was described in the JOURNAL last spring.

A west-bound train over the Fitchburg Railroad, one day last week, consisted of twenty-two passenger cars, and had to be run in two divisions. Two excursion parties and the St. Louis express made its great size.

"CURTIS."

BOSTON, October 26, 1882.

Northern Central Railway.

THE following is a comparative statement of the earnings, expenses, etc., of the Northern Central Railway for the months of September, 1881 and 1882:

	1882.	1881.
Gross earnings.....	\$592,435	\$429,565
Operating expenses.....	299,816	279,012
Extraordinary expenses.....	23,002	100,148
Total expenses.....	<u>\$322,848</u>	<u>\$379,159</u>

Net earnings \$269,587 \$50,406

For the nine months ending Sept. 30, 1881 and 1882, the earnings, expenses, etc., were:

	1882.	1881.
Gross earnings.....	\$4,421,277	\$4,020,253
Operating expenses.....	2,459,633	2,407,632
Extraordinary expenses.....	220,820	314,155
Total expenses.....	<u>\$2,680,453</u>	<u>\$2,731,787</u>

Net earnings \$1,740,824 \$1,248,646

A PATENT has just been taken out in Germany for an engine, the piston of which is driven backward and forward by small charges of gunpowder supplied at each end by an automatic arrangement. The ignition is effected by the motion of the piston, which draws in a flame of gas or spirit, the access being regulated by side valves, which also open outlets for the escape of the gases of combustion.

THE STOCK EXCHANGES AND MONEY MARKET.

New York Stock Exchange.

Closing Prices for the week ending Oct. 25.

	Th. 19.	F. 20.	Sat. 21.	M. 23.	Tu. 24.	W. 25
Adams Express.	140	140	140	140	140	140
Albany and Susq.	131 1/2	131 1/2	131 1/2	131 1/2	131 1/2	131 1/2
1st mortgage.						
ad mortgage.	105	105	105	105	105	105
American Express.	95	95	95	95	95	95
Burl., C. R. & Nor.	79 1/2	79 1/2	79 1/2	79 1/2	79 1/2	79 1/2
1st mortgage 5s.	101	101	101	101	101	101
Canada Southern.	67 1/2	67 1/2	67 1/2	67 1/2	67 1/2	67 1/2
1st mortgage guar.	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2
Central of N. Jersey	72 1/2	73 1/2	73 1/2	72 1/2	72 1/2	72 1/2
1st mort. 1890.	116 1/2	116 1/2	116 1/2	116 1/2	116 1/2	116 1/2
7s., consol. ass.	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2	108 1/2
7s., convertible ass.	109 1/2	109 1/2	109 1/2	109 1/2	109 1/2	109 1/2
7s., Income.	85	85	85	85	85	85
Adjustment.						
Central Pacific.	90 1/2	90 1/2	90 1/2	90 1/2	90 1/2	90 1/2
6s., gold.	114 1/2	114 1/2	114 1/2	114 1/2	114 1/2	114 1/2
1st M. (San Joaq.)						
1st M. (Cal. & Or.)						105
Land grant 6s.	103 1/2	104 1/2	104 1/2	103 1/2	103 1/2	103 1/2
Chesapeake & Ohio.	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2
1st pref.	38 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2
ad pref.	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2
1st mort., series B	90	89	89	89 1/2	89 1/2	89 1/2
Chicago and Alton.	140 1/2	142	142 1/2	142 1/2	142 1/2	142 1/2
Preferred.	122	122	122	122	122	122
Sinking Fund.						116 1/2
Chi., Bur. & Quincy	131 1/2	131 1/2	131 1/2	131 1/2	131 1/2	131 1/2
7s., Consol. 1903.	127 1/2	127 1/2	127 1/2	127 1/2	127 1/2	127 1/2
Chi., Mil. & St. Paul	109 1/2	110	109 1/2	109	110 1/2	109 1/2
Preferred.	125	124 1/2	125 1/2	125 1/2	125 1/2	125 1/2
1st mortgage, 8s.		132 1/2				
ad mort., 7 3/4%.		125	125 1/2	125	125	125
7s., gold.						
1st M. (La. C. div.)		125	125 1/2	125	125	125
1st M. (I. & M. div.)			125 1/2	125 1/2	125 1/2	125 1/2
1st M. (L. & D. ext.)	124 1/2	124 1/2	124 1/2	124 1/2	124 1/2	124 1/2
1st M. (H. & D. div.)						
1st M. (O. & M. div.)						
Consolidated S. F.	124	125	125	125	125	126
Chi. & Northwestern	144 1/2	145	145 1/2	144 1/2	145 1/2	145 1/2
Preferred.	161 1/2	163 1/2	163	161 1/2	163	163
1st mortgage.	106 1/2					
Sinking Fund 6s.	110	109	109	109	109	109
Consolidated 7s.						
Consol. Gold bo'ds	127 1/2	126 1/2	127 1/2	127 1/2	127 1/2	127 1/2
Do. reg.	126 1/2					
Chi., R. Ial. & Pac.	134 1/2	133	133 1/2	132 1/2	133	132 1/2
6s., 1917, c.						
Clev., Col., Clin. & Ind.	83 1/2	83	83 1/2	83 1/2	83 1/2	83
1st mortgage.						
Clev. & Pittsburg gr.	140	140	140	140	140	140
7s., Consolidated.						
4th mortgage.						
Col., Chi., & Ind. Cent	9	9	9	9	9 1/2	9 1/2
1st mortgage.						
ad mortgage.						
Del. & Hud Canal.	112 1/2	112 1/2	113 1/2	113 1/2	113 1/2	114
Heg. 7s., 1891.						
Heg. 7s., 1884.						
7s., 1894.						
Del., Lack. & Western	135 1/2	136 1/2	137 1/2	136 1/2	137 1/2	137 1/2
ad mortgage 7s.						
Consol. 1907.						
Erie Railway.						
1st mortgage.						
ad mort. 5s. ext.						
3d mortgage.	101	101	101	101	101	101
4th mort. 5s. ext.						
5th mortgage.						
7s., Consol. gold.		125	125	125	125	125
Great West. 1st mort						
ad mortgage.						107
Hannibal & St. Jo.						
Preferred.	80	80	80	80	80	80
8s., Convertible.	105	105	105	105	105	105
Houston & Tex. Cen.						
1st mortgage.						
ad mortgage.						110 1/2
Illinois Central.	147	147 1/2	148	148	148	148
LakeShore & Mich. So.	112 1/2	112 1/2	112	112 1/2	112 1/2	112 1/2
Consol. 7s.						
Consol. 7s., reg.		125	125	125	125	125
ad Consolidated.						124
Leh. & W. B. con.ass						103
Long Dock bonds.						
Louisville & Nash.	55 1/2	55 1/2	56	55 1/2	55 1/2	55 1/2
7s., Consolidated.			115	115 1/2	115	115
Manhattan	40	40 1/2	40	40	40	40
1st pref.						87
Met. Elevated.						
1st mortgage.	99	97	96	97 1/2	99	99
Michigan Central.	100 1/2	101	101 1/2	100 1/2	102 1/2	102 1/2
7s., 1905.	128 1/2	128 1/2	128 1/2	128 1/2	128 1/2	128 1/2
Morris & Essex.	125	125	125	125	125	125
ad mortgage.	125	125	125	125	125	125

ad mortgage.		115				
7s. of 1871.						
7s. convertible.						
7s. Consolidated.	125 1/4					
N.Y. Can. & Hud. R.	132 1/2	132 1/2	132 1/2	133	133	
6s. S. F. 1883.						102 1/2
6s. S. F. 1887.						
1st mortgage.						
1st mortgage, reg.						
N.Y. Elevated.						
1st mortgage.	115 1/2	115	115	115	115	115 1/2
N.Y. & Harlem.						
Preferred.						
1st mortgage.						
1st mortgage, reg.						
N.Y. Lake Erie & W.	41 1/2	41 1/2	41 1/2	41	42	41 1/2
Preferred.	86 1/2	86	85	86 1/2	86	
ad Consolidated.	100		99 1/2	99 1/2	99 1/2	99 1/2
New ad 5d Fund.						
N.Y., N.Hav'n & Hart.		183		183 1/2	184	
North Mo. 1st mort.		118 1/2				
Northern Pacific.	44 1/2	44 1/2	44 1/2	44 1/2	44 1/2	45 1/2
Preferred.	92 1/2	92	92 1/2	92 1/2	93 1/2	92 1/2
Ohio & Mississippi.	39	38 1/2	38	37 1/2	37 1/2	37 1/2
Preserved.						
ad 2d mortgage.	120 1/2					
Consolidated 7s.						
Consol. S. Fund.						
Pacific Mail S. S. Co.	39 1/2	39	39			38 1/2
Pacific R. R. of Mo.						
1st mortgage.						
2d mortgage.						
Panama.						
Phila. & Reading.	61 1/2	61 1/2	61 1/2	60 1/2	62	61 1/2
Pitts. Ft. W. & Chi. gtd.	138		138	138		138 1/2
1st mortgage.						
2d mortgage.						
3d mortgage.						
Pullman Palace Car	129 1/2		129 1/2	128	128	128 1/2
Quicksill'r Min'g Co.						
Preferred.						
St. Louis & San Fran.				37 1/2	38	
Preferred.		57				
1st Preferred.			95			
St. L., Alt'n & T. H.		42	42			
Preferred.	82 1/2		81	80	83 1/2	84
1st mortgage.						
2d mort. pref.						
Income bonds.				99 1/2	100	
St. L., Iron Mt. & S.						
1st mortgage.						
2d mortgage.	108	108 1/2				
Toledo and Wabash.						
1st mortgage.						
2d mortgage.						103
7s. Consolidated.	110		100			
St. Louis Division.						
Union Pacific.	106 1/2	106 1/2	106 1/2	106 1/2	107 1/2	107 1/2
1st mortgage.	115 1/2	115 1/2		115 1/2	115 1/2	115 1/2
Land Grant 7s.		110				
Sinking Fund 8s.	117 1/2			117 1/2		
United States Ex.	70	68				
Wabash, St. L. & Pac.	32	31 1/2	32 1/2	30 1/2	32 1/2	31 1/2
Preferred.	60 1/2	60	59 1/2	59 1/2	57 1/2	58 1/2
New mort. 7s.						
Wells-Fargo Ex.	131					
Western Pacific b'ds.						
Western Union Tel.	88 1/2	87 1/2	87 1/2	86 1/2	88	87 1/2
7s. S.F conv., 1900.						
FEDERAL STOCKS:-						
U.S. 4s, 1907, reg.				119 1/2	119 1/2	
U.S. 4s, 1907, coup.				119 1/2		
U.S. 4 1/2s, 1891, reg.	113					
U.S. 4 1/2s, 1891, coup.						
U.S. 5s, cont'd at 3 1/2						
U.S. 3s, reg.				102 1/2		
Dt. of Col. 3-65s, reg.						
Dt. of Col. 3-65s, coup.				108		

burg.	130	%					
New England	55	%	52		51	%	
				52	52		
ern N. H.				116	%	116	%
ch&Worcester	160			160			
& Lake Cham							
colony	136	%	136	136	136	%	
ll. & Balt. (\$50).							
d, Saco & Ports							
o & Ark Val 75	114	%			114	%	
an Palace Car	129	%	129		129	%	
Pacific	107	%	106	%	107		
	113						
d Grant 75							
king Fund 8s.							
ont & Mass.					132		
ater & Nashua							
ridge (Horse).							
opolitan (Horse)							
ex (Horse).							
Hecla Min'g Co	248	248	249	248			
y.	68	%	70	69	%	69	%

Philadelphia Stock Exchange

Closing Prices for the Week Ending Oct. 31

Baltimore Stock Exchange.*Closing Prices for the Week Ending Oct. 25.*

W.18.Th.19.F.20.Sat.21.M.22.Tu.24.

Baltimore & Ohio.....	197	197	197	197	197	197	197
6s, 1885.....							
Central Ohio (\$50).....	108½	108½	108½	108½	108½	108½	108½
1st mortgage.....							
Marietta & Cincin'ti.....							
1st mortgage, 7s.....	101	101	101	101	101	101	101
2d mortgage, 7s.....							
3d mortgage, 8s.....							
Northern Oen. (\$50).....	57½	57½	57½	57½	57½	57½	57½
2d mort. 6s, 1885.....							
3d mort. 6s, 1900.....	116	116	116	116	116	116	116
6s, 1900, gold.....							
6s, 1904, gold.....							
Pitts. & Connellsy. 7s.....							
Virginia & Consol. 5s.....	57	57½	57½	57½	57½	57½	57½
Consol. coupons.....							
10-40 bonds.....	42½	42½	42½	42½	42½	42½	42½
Def'd Certificates.....							
New 3s.....							
Western Maryland.....							
1st M., end, by Balt.....							
2d M., do.....							
3d M., do.....							
1st M., unendorsed.....							
2d M., end Wash Co 116.....							
2d M., preferred.....							
City Passenger R. R.							

London Stock Exchange.*Closing Prices*

	Oct. 6.	Oct. 13.					
Baltimore and Ohio 5s, 1927.....	108	110	108	110	110	110	110
Central of N. J., \$100 shares.....	80	85	80	85	85	85	85
Do. consol. mort.	109	111	109	111	111	111	111
Do. Income Bonds.....	88	92	88	92	92	92	92
Central Pacific of Cal., \$100 shs. 93½.....	94½	94½	93½	94½	94½	94½	94½
Do. 1st mort. 6s, 1895-98.....	117	119	117	119	119	119	119
Dot, G'd Haven & Mil. Equip bds. 115.....	117	115	117	115	117	115	117
Do. Con. M. sp.c., till'g after p.c. 113.....	115	113	115	113	115	113	115
Illinois Central \$100 shares.....	142	144	148	150	150	150	150
Do. S. F. 5s, 1903.....	104	106	104	106	106	106	106
Lehigh Valley Cons. mort. 1923.....	115	119	115	119	119	119	119
Louisville and Nashville mort. 6s 92.....	94	93	93	93	93	93	93
Do. capital stock \$100 shares.....	58	60	55	58	58	58	58
N. Y. Con. & Hud. R. mort. bonds. 132.....	136	132	132	136	136	136	136
Do. \$100 shares.....	136½	137½	136½	137½	137½	137½	137½
Do. mort. bonds (stg.).....	120	122	120	122	122	122	122
N. Y. Lake Erie & West. \$100 shs. 43½.....	44	43½	44	43½	44	43½	44
Do. 6 p. c. pref. \$100 shares.....	87	89	88	90	90	90	90
Do. 1st Con. Mort. bonds (Erie). 127.....	130	127	130	127	130	127	130
Do. do. Funded Coupon bonds. 124.....	127	124	127	124	127	124	127
Do. 2d Consol. Mort. bonds.....	104	102	104	102	104	102	104
Do. do. Funded Coupon bonds. 99.....	99	99	99	99	99	99	99
N. Y. Pa. & Ohio 1st mort. bonds. 54½.....	55½	55½	55½	55½	55½	55½	55½
Do. Prior Lien bonds (sterling). 100.....	105	100	105	100	105	100	105
Pennsylvania \$50 shares.....	65½	66	66½	66½	66½	66½	66½
General Mortgage.....	121	123	121	123	123	121	123
Phil. & Erie Gen. mort. 6s, 1920-....	117	119	117	119	119	117	119
Philadelphia & Reading \$50 shs. 32½.....	33	33	33	33	33	33	33
General Consol. Mortgage.	117	115	117	115	117	115	117
Do. Improvement Mortgage.....	102	104	102	104	104	102	104
Do. Gen. Mtg. '74, ex-def'd coup. 97.....	99	97	99	97	99	97	99
St. L. Bridge 1st mort. gold bond. 120.....	122	120	122	120	122	120	122
Do. 1st pref. stock.....	97	100	97	100	97	100	97
S. P'c of Cal., 1st mort. 6s, 1905-6. 105.....	107	106	108	106	108	106	108
Union Pacific 1st mtg. 6s, 1866-9. 118.....	120	118	120	118	120	118	120
Wabash, St. L. & P. \$100 shares.....	37	38	35	37	35	37	37
Do. \$100 pref. shares.....	67½	68½	66	67	67	66	67
Do. gen. mort. bonds.....	87	83	86	88	86	88	88

AMERICAN RAILROAD JOURNAL.**Financial and Commercial Review.**

THURSDAY EVENING, October 26, 1882.

The rate for call loans on stocks this morning was 5@6 per cent, and on United States bonds 4 per cent. In the afternoon the rate was 5 per cent, advanced in the last hour to 6 per cent, but closed at 3@4 per cent.

The posted rates for prime bankers' sterling were 4.82@4.86%. The actual rates were 4.81½@4% and 4.85%@4.86%, with cable transfers 4.86%@4.87, and prime commercial bills 4.80@4%. The actual rates for Continental bills are as follows: France, 5.22%@5.23% and 5.19%; Marks 94%@4% and 95½@4%, and guilders, 39%@4%.

The following securities, aggregating \$61,177,500, have been admitted to call at the New York Stock Exchange:

Chicago and Northwestern Railway Company.—\$1,830,000 Sinking fund 5s of 1879, \$1,000 each, maturing Oct. 1, 1929, Nos. 3,506 to 5,335 inclusive; \$720,000 Leelanau and Lake Superior Railway first mortgage 6 per cent bonds, for \$1,000 each, maturing in 1901, Nos. 1 to 720 inclusive; and \$600,000 Des Moines and Minneapolis Railroad first mortgage 7 per cent bonds, for \$1,000 each, maturing in 1907, No. 1 to 600 inclusive.

East Tennessee, Virginia and Georgia Railroad Com-

pany.—\$3,500,000 First mortgage consolidated 5s for \$1,000 each, Nos. 10,992 to 14,921 inclusive.

Denver and Rio Grande Railway Company.—\$1,020,000 First consolidated 7 per cent mortgage bonds, for \$1,000 each, dated January 1, 1880, with 30 years to run, Nos. 12,393 to 13,412 inclusive.

Northern Pacific Railroad Company.—\$11,987,000 General first mortgage 6 per cent railroad and land grant sinking fund gold bonds dated January 1, 1881, payable January 1, 1921, for \$1,000 each, Nos. 20,001 to 31,987 inclusive.

Mexican Central Railway Company, (Limited).—\$16,704,000 First mortgage 7 per cent bonds, dated July 1, 1881, and to mature July 1, 1911, bearing interest at the rate of 7 per cent per annum, \$1,000 each, Nos. 1 to 16,704 inclusive.

Columbus, Hocking Valley and Toledo Railway Company.—One hundred and three thousand one hundred and sixty-five shares of stock, of the par value of \$100 per share; and \$14,000,000 first consolidated mortgage 5 per cent bonds, dated September 1, 1881, and payable September 1, 1931, with interest at 5 per cent, \$1,000 each, Nos. 1 to 14,300 inclusive.

The officers of the Bank of Ottawa, noticed in our last issue as having an authorized capital of \$1,000,000, and a paid up capital of \$600,000, are: manager, George Burn; who is also cashier; accountant, William J. Christie-teller, John Bangs. B. E. Walker and J. H. Goadby are the New York agents. Branches have recently been established in the towns of Arnprior and Pembroke, Ontario, and Winnipeg, Manitoba.

The chief of the Bureau of Statistics at Washington reports that the total values of the exports of petroleum and petroleum products during the month of August, 1882, were \$3,599,440, and during August, 1881, \$5,062,494. For the eight months ended August 31, 1882, \$30,946,856, and for the corresponding period of the previous year \$30,190,250.

The value of the exports of breadstuffs from the United States in September, 1882, was \$21,566,667, and in September, 1881, \$19,947,433. For three months ended 30th September, 1882, \$69,656,538, and same time in 1881, \$65,471,721. For nine months ended 30th September, 1882, \$134,512,779, and same time in 1881, \$177,452,628.

The value of the exports from the United States of provisions, tallow and dairy products in September, 1882, was \$7,453,784, and in September, 1881, \$9,695,218. In the nine months ended 30th of September, 1882, \$73,375,969, and in same period of the previous year, \$102,803,554. The value of exports of dairy products in five months ended 30th of September, 1882, was \$8,478,511, and in five months of the previous year \$12,489,493.

A decision was rendered in the United States Supreme Court at Washington on the 23d inst., in the case of the Chicago, Danville and Vincennes Railroad Company et al., appellants, vs. Wm. R. Fosdick et al., appeal from the Circuit Court of the United States for the Northern District of Illinois. The court orders that the appeal from the decree of April 12, 1877, and of April 16, 1877, respectively, be dismissed, upon the ground that those decrees were vacated by the reversal of the prior decree of foreclosure and sale rendered Dec. 5, 1876, and that the decrees entered Nov. 19, 1877, in favor of Frederick W. Huldeker, Thos. W. Shannon and John M. Denison, trustees, be reversed, and that the cause be remanded, with directions to proceed therein as may be just and equitable.

According to the report of the Commissioner of Patents, there were, during the fiscal year ending June 30, 1882, 30,065 applications for patents, registrations of trade marks, labels, and reissue of patents received. Of these 17,713 patents were granted and 10,790 trade marks registered. The total receipts of the office from all sources were \$930,864.14 and the expenditures \$651,719.50, leaving a surplus of \$279,144.64.

Acting Secretary of the Treasury French on the 24th inst. decided that a Chinaman having a through ticket from New York to any place in the United States, having passed through Canada on the Grand Trunk Railway, is entitled to admission into the United States without further evidence of his right than such ticket.

The whole amount of real and personal estate in the District of Columbia subject to taxation this year is \$92,533,665, against \$90,308,495 last year. The total tax this year will be \$1,500,797.57, of which about \$1,200,000 will be collected.

A decision of the utmost importance to a large class of

applicants for pensions has just been rendered by Acting Secretary Jolyn of the Interior Department. He holds in effect that seven years absence may be taken as proof presumptive of a soldier's death and such proof shall warrant the issue of a pension to his family, if other requirements have been complied with. This decision is a direct reversal of the practice which has hitherto prevailed in the Pension Bureau. Positive proof of the soldier's death was required, which, in many cases, it was impossible to produce.

From the annual report of the Money Order Department of the United States Post Office, we learn that during the fiscal year ending June 30, 1882, the domestic operations of the 5,491 authorized money order offices (to which number 449 have been added since the close of the year, while one office has been discontinued), reached the sum of \$113,400,118.21 in money orders, and of \$113,388,301.90 in orders paid and repaid, a gain in each case of about eight per cent. The fees received from the public amounted to \$1,053,710.55, an increase of nearly nine per cent. There were 377,443 international money orders issued of the value of \$6,536,514.48 and 117,883 such orders paid, amounting to \$2,453,462.79, while the total amount of fees paid by the public was \$145,644.25, so that the domestic and international money orders issued during the year aggregated \$119,936,632.69 and the orders paid with the repayments of over \$115,000,000.

In the suit brought by the Union Pacific Railroad Company against the Credit Mobilier of America to recover \$685,500.71, with interest from November, 1867, judgment for \$1,299,365.87 was entered by default in the Supreme Court, in this city, in favor of the plaintiff. The plaintiff sued as assignee of Thomas C. Durant and others, trustee under what is known as the Oakes Ames contract with the Union Pacific Company for the construction of their road. Jay Gould appears in the judgment roll as President of the Credit Mobilier.

The net earnings of the Philadelphia & Reading Railroad and Coal and Iron Companies for September were \$1,088,830.37—a decrease of \$39,988.05 as compared with corresponding month last year. Total net earnings of both companies for fiscal year ending Sept. 30 were \$8,380,052.28, an increase of \$316,375.12 over those of the previous year.

The earnings of the Marietta and Cincinnati Railroad for August, 1882, were \$203,078, against \$153,818 in 1881, a gain of \$49,260. The earnings for September reached \$201,929, against \$177,566, a gain of \$24,363. The passenger earnings for September were the largest in the history of the road, being \$65,878, against \$60,996 in 1881, a gain of \$4,882.

The interest on the bonds and stocks of this city will become due on the 1st of November. Comptroller Campbell will pay on that day the sum of \$3,143,951.43. Of this sum \$959,367.93 will go to the sinking fund.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 14%; Boston and New York Air Line pref. 8c; Buffalo and Erie 7s, new, 120; Chicago, St. Paul, Minneapolis and Omaha, 48%; do. pref., 107½; do. consol., 107%; Chicago, St. Louis and New Orleans, 8c; Chesapeake and Ohio 1st, series A, 104; do. cur. 6s, 54%; Cleveland and Toledo S. F., 106; Chicago and St. Paul, Chicago and Milwaukee S. F., 99%; do. Southern Minn. div. 1st, 109; do. Southwestern div. 1st, 109%; do. Iowa and Dakota div. 1st, 125%; Chicago, Burlington and Quincy, S. F. 5s, 102; do. 8s, 105%; do. Iowa div. 4s, 84%; Denver, South Park and Pacific 1st, 102%; Dubuque and Sioux City, 9%; Denver and Rio Grande, 51; do. consol., 95½; East Tennessee, Virginia and Georgia, 9½; do. pref., 16; do. inc., 40; Evansville and Terre Haute, 81; do. 1st, 96; Elizabethtown, Lexington and Big Sandy 6s, 97; Fort Worth and Denver, 42½; do. 1st, 60; Indiana, Bloomington and Western, 41%; do. 1st, 89; do. inc., 47½; do. Eastern div. 6s, 94; International and Great Northern 1st, 106%; do. coup. 6s, 82; Kansas Pacific 6s, 110; do. consol., 103%; do. 6s, Denver div. ass., 100; Keokuk and Des Moines 1st, 101½; Lake Shore div. bonds, 120; Lafayette, Bloomington and Muncie 1st, 103½; Lake Erie and Western, 34; do. inc., 50; Long Island, 60; do. consol. 54, 98; Louisville, New Albany and Chicago, 73½; Louisville and Nashville, Cecilian Branch 1st, 105; do. Evansville, Henderson and Nashville 1st, 100; do. genl. mort. 6s, 90½;

do. N. O. and Mobile 1st, 90; Michigan Southern S. P., 108%; Michigan Central 5s, 97; Minneapolis and St. Louis, 31%; do. pref., 72; Missouri, Kansas and Texas, 35%; do. 7s, consol., 106; do. ad., 62%; do. genl. mort., 6s, 85; Missouri Pacific, 105%; Memphis and Charleston, 52; Milwaukee, Lake Shore and Western 1st, 101; do. pref., 50%; Manhattan Beach, 19; Manhattan Co., 40; Metropolitan Elevated 2d, 87; Mobile and Ohio, 22; do. 1st mort., 109; New York, Chicago and St. Louis, 16%; do. pref., 33%; do. 1st, 90%; Nashville, Chattanooga and St. Louis, 52; New York, Ontario and Western, 27; Norfolk and Western pref., 57%; do. genl. mort., 102; Northern Pacific 1st, 104; New Orleans Pacific 1st, 89%; Ohio Central, 16%; do. 1st, 94; do. inc., 40; Oregon Trans-Continental, 86%; Ohio Southern, 15%; do. inc., 29%; Oregon Railway and Nav., 156; do. 1st, 108; Oregon Short Line 6s, 99%; Peoria, Decatur and Evansville, 28; do. 1st, 104%; do. Evansville div. 1st, 97%; Rochester and Pittsburgh, 22%; Richmond and Danville, 74%; do. 1st, 96; do. debent., 65%; Richmond, Danville and West Point, 35%; Rome, Watertown and Ogdensburg extended 5s, 71; do. inc., 32; St. Paul and Duluth, 34%; do. pref., 92%; St. Paul, Minn. and Man., 156 do. 1st, 111; do. ad., 109%; do. Dakota ext. 1st, 109; St. Louis and Iron Mt. Arkansas Branch 1st, 109; do. Cairo and Fulton 1st, 107%; do. 5s, 76; do. pref. inc., 96%; Southern Pacific of Cal. 1st, 103%; South Pacific of Mo. 1st, 103%; St. Louis, Alton and Terre Haute div. bonds, 45; St. Louis, Kansas City and Northern R. E. 7s, 104; do. Omaha div. 1st, 108; do. St. Charles Bridge 1st, 85; St. Paul and Sioux City 1st, 110; Texas and Pacific, 42; do. inc. L. G., 60%; do. Rio Grande div. 1st, 81%; Toledo, Delphos and Burlington inc., 21; Winona and St. Peter 1st, 108; Wabash, St. Louis and Pacific gen'l mort. 6s, 81%; do. Iowa div. 1st, 90; do. Chicago div. 1st, 83; Arkansas 7s, Central R. R., 10; Louisiana consol., 69%; Missouri 6s, 1886, 108; do. H. & St. J. issue, 1886, 109%; North Carolina 6s, S. T., 3d class, 6; South Carolina 6s, non-fund., 6; Tennessee 6s, old, 48; do. 6s, new, 47%; do. compromise, 56; American Cable, 72; Mutual Union Tel., 24; do. 6s, 76; Colorado Coal and Iron, 40; do. 6s, 87; Maryland Coal, 19; New Central Coal, 19; Homestake Mining, 17%; Standard, 5%.

Boston.—Atlantic and Pacific Blocks, 105%; do. 6s, 102; Boston Land, 6%; Boston Water Power, 3%; Boston, Revere Beach and Lynn, 115; Burlington and Missouri River in Nebraska 6s, non-exempt, 102%; Connonton Valley, 5; do. pref., 11%; do. 6s, 59%; do. 5s, 55; Chicago and West Michigan, 67; Chicago, Burlington and Quincy 4s, old, 84%; do. 4s, Denver ext., 84%; Flint and Pere Marquette, 22; do. pref., 96%; Fort Scott Branch 7s, 107%; Iowa Falls and Sioux City, 90; Illinois Grand Trunk 8s, 113; Kansas City, Springfield and Memphis blocks, 100; Kansas City, St. Joseph and Council Bluff 7s, 113%; Kansas City, Fort Scott and Gulf 1st, 110%; Little Rock and Ft. Smith, 49; do. 7s, 107%; Mexican Central, 22; do. 7s, 74%; do. blocks No. 3, 99%; Massachusetts Central, 5%; do. 6s, 39; Michigan Central, 102; Marquette, Houghton and Ontonagon, 69; New Mexico and Southern Pacific 7s, 114%; New York and New England 6s, 105%; Oregon Short Line 6s, 98%; Ogdensburg and Lake Champlain consol. 6s, 91; Old Colony 6s, 117; Portsmouth, Gt. Falls and Conway 6s, 88%; Rutland pref., 21; Sonora 7s, 104%; Summit Branch, 10%; Toledo, Delphos and Burlington Branch inc., 14%; do. Southeast div. 6s, 60; Toledo, Cincinnati and St. Louis, 6%; do. 6s, 60; do. Branch inc., 15%; Wisconsin Valley 7s, 112%; Wisconsin Central, 17%; do. 7s, 1st Series, 80; Allouez Mining Co., 2%; Atlantic, 16%; Franklin, 16%; Huron, 2%; Napa Quicksilver, 4%; Osceola, 35%; Pewabic, 9; Ridge, 1; Sullivan, 1%.

Philadelphia.—Am. S. S. Co. 6s, 105; Allegheny Valley inc. scrip, 46; Central Transp., 34; Cambria Iron Co., 120; Cincinnati 7-30s, 131%; Huntingdon and Broad Top Mt., 18; Northern Pacific pref. scrip, 92; Norfolk and Western pref., 56%; Philadelphia City 6s, 1887, 110; do. 6s, 1889, 112; do. 6s, 1894, 126; do. 6s, 1902, 133; Philadelphia, Germantown and Norristown, 109; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading R. R. consol. gold 6s, 113%; do. scrip, 96; St. Paul and Duluth pref., 92; Sunbury and Erie 7s, 125; Texas and Pacific 1st, 6s, 104; do. consol. 6s, 94; West Jersey 1st, 6s, 116; Warren and Franklin 7s, 112. The latest quotations are: City 6s, 108@120; do. free of tax, 127@134; do. 4s, new, 106@114; Pennsylvania State 5s, new loan, 118@118%; do. 4s, old, 111@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 30%@31; do. consol. mort. 7s, reg.,

126@127; do. gen'l mort. 6s, coupon, 94@95; do. 7s, 1893, 118@120; do. new conv., 73@74; United New Jersey R. R. and Canal, 190@191; Buffalo, Pittsburg and Western, 20@201%; Pittsburgh, Titusville and Buffalo 7s, 96@96%; Camden and Amboy mort. 6s, 1889, 115@115%; Pennsylvania R. R., 64@64%; do. general mort. 6s, coupon, 123@127; do. reg., 125@—; do. consol. mort. 6s, reg., 121@122; Little Schuylkill R. R., 57@58%; Schuylkill Navigation pref., 12@14; do. 6s, 1882, 89@—; Elmira and Williamsport pref., 58@60; do. 5s, —@100; Lehigh Coal and Navigation, 43@44; do. 6s, 1884, 103@103%; do. R. R. loan, 114@116; do. Gold Loan, 112@113%; do. consol. 7s, reg., 117@118; Northern Pacific 1st, 89%; Ohio Central, 16%; do. 1st, 94; do. inc., 40; Oregon Trans-Continental, 86%; Ohio Southern, 15%; do. inc., 29%; Oregon Railway and Nav., 156; do. 1st, 108; Oregon Short Line 6s, 99%; Peoria, Decatur and Evansville, 28; do. 1st, 104%; do. Evansville div. 1st, 97%; Rochester and Pittsburgh, 22%; Richmond and Danville, 74%; do. 1st, 96; do. debent., 65%; Richmond, Danville and West Point, 35%; Rome, Watertown and Ogdensburg extended 5s, 71; do. inc., 32; St. Paul and Duluth, 34%; do. pref., 92%; St. Paul, Minn. and Man., 156 do. 1st, 111; do. ad., 109%; do. Dakota ext. 1st, 109; St. Louis and Iron Mt. Arkansas Branch 1st, 109; do. Cairo and Fulton 1st, 107%; do. 5s, 76; do. pref. inc., 96%; Southern Pacific of Cal. 1st, 103%; South Pacific of Mo. 1st, 103%; St. Louis, Alton and Terre Haute div. bonds, 45; St. Louis, Kansas City and Northern R. E. 7s, 104; do. Omaha div. 1st, 108; do. St. Charles Bridge 1st, 85; St. Paul and Sioux City 1st, 110; Texas and Pacific, 42; do. inc. L. G., 60%; do. Rio Grande div. 1st, 81%; Toledo, Delphos and Burlington inc., 21; Winona and St. Peter 1st, 108; Wabash, St. Louis and Pacific gen'l mort. 6s, 81%; do. Iowa div. 1st, 90; do. Chicago div. 1st, 83; Arkansas 7s, Central R. R., 10; Louisiana consol., 69%; Missouri 6s, 1886, 108; do. H. & St. J. issue, 1886, 109%; North Carolina 6s, S. T., 3d class, 6; South Carolina 6s, non-fund., 6; Tennessee 6s, old, 48; do. 6s, new, 47%; do. compromise, 56; American Cable, 72; Mutual Union Tel., 24; do. 6s, 76; Colorado Coal and Iron, 40; do. 6s, 87; Maryland Coal, 19; New Central Coal, 19; Homestake Mining, 17%; Standard, 5%.

Baltimore.—Atlanta and Charlotte, 68; do. 1st, 106%; do. inc., 80; Baltimore City 6s, 1890, 116; do. 5s, 1900, 118; do. 5s, 1916, 122%; Columbia and Greenville's 1st, 101; do. ad., 2d, 8s; Canton Co., 5; Cincinnati 7-30s, J. & J., 131%; Charlotte, Columbia and Augusta, 42%; Central Ohio pref., 52; Maryland Defense 6s, 105; Marietta and Cincinnati 1st Trust certificates, 125%; do. 2d do., 101%; do. 3d do., 57%; Northern Central 5s, series A, 98; Ohio and Mississippi, Springfield div. 1st, 116%; Virginia and Tennessee 6s, 101%; Virginia Feeder, 35%; Virginia Midland 2d mort., 107%; do. 4th mort., 53%; do. 5th mort., 94; do. inc., 56%; Wilmington, Columbia and Augusta, 107%. The latest quotations are: Atlanta and Charlotte 1st, 106@106%; Baltimore and Ohio, 192@195; do. 6s, 1885, 104@—; Baltimore City 6s, 1890, 116@116; do. 6s, 1902, 129@130—; do. 5s, 1916, 122@—; do. 4s, 1920, 111@—; Columbia and Greenville 1st, 100@101; Canton Co. 6s, 103@105; Marietta and Cincinnati 1st, 127@—; do. 2d, 101@101%; do. 3d, 57@57%; Northern Central, 57@57%; do. 5s, Series A, 97@98; Ohio and Mississippi, Springfield div. 1st, 116@116%; Richmond and Danville 1915, 95@97%; Wilmington, Columbia and Augusta, 107@107%; Virginia Midland 5th mort., 93@94; do. inc., 56@60; Virginia consols., 56@56%; do. 10-40s, 42@42%; do. new 3s, 50@—.

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 14, and for the year to the same date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.
Reading Railroad	203,284	7,068,099
Schuylkill Canal	15,597	393,595
Lehigh Valley	150,650	5,335,642
Delaware, Lackawanna and Western	112,608	3,531,875
Shamokin	22,851	888,931
Central R. R. of New Jersey	104,690	3,403,887
United R. R. of New Jersey	40,839	1,327,870
Pennsylvania Coal	35,805	1,097,885
Delaware and Hudson Canal	80,428	2,718,723
Huntingdon and Broad Top Mountain	13,057	365,126
Penn. and New York	30,163	1,239,172
Clearfield, Pa.	50,594	2,232,306

The total tonnage of anthracite coal from all the regions for the week ending Oct. 14, as reported by the several carrying companies, amounted to 669,018 tons, against 636,842 tons in the corresponding week last year, an increase of 32,176 tons. The total amount of anthracite mined for the year is 22,201,340 tons, against 21,499,556 tons for the same period last year, an increase of 701,784 tons. The quantity of bituminous coal sent to market for the week amounted to 99,339 tons, against 99,041 tons in the corresponding week last year, an increase of 298 tons. The total amount of bituminous mined for the year is 3,363,51 tons, against 3,307,859 tons for the corresponding period last year, a decrease of 444,348 tons. The total tonnage of all kinds of coal for the week is 768,357 tons, against 735,883 tons in corresponding week

last year, an increase of 32,474 tons, and the total tonnage for the coal year is 25,564,851 tons, against 25,307,415 tons to same date last year, an increase of 257,436 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 14 was 212,641 tons, of which 163,063 tons were coal and 49,604 tons coke. The total tonnage for the year thus far has been 8,623,021 tons, of which 6,401,778 tons were coal and 2,221,243 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 14 were 46,274 tons, and for the year to that date 955,551 tons, a decrease of 699,487 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—for the week, 25,912 tons; year, 679,858 tons; decrease as compared with 1881, 381,336 tons. Chesapeake and Ohio Canal—Week, 14,767 tons; year, 143,322 tons; decrease as compared with 1881, 218,352 tons. Pennsylvania Railroad—Week, 5,261 tons, year, 126,356 tons, decrease from last year, 95,099 tons. The Reading Railroad shipment for last week, ending October 21, was about 202,500 tons, of which 53,000 tons were sent to and 40,000 tons shipped from Port Richmond, and 11,500 tons sent to and 12,000 tons shipped from Elizabethport.—*Philadelphia Ledger*, Oct. 23.

LEAVING local traffic out of the calculation, it is said that more travelers use the railroad station in Kansas City than any other in America, a number of important lines coming together at that point. The keeper of the restaurant has to pay a rental of \$20,000 a year.

ABOUT \$12,000,000 of the Tennessee State debt has thus far been funded, out of the total of \$27,000,000 outstanding. The officials who have been refunding it in this city have closed up their office, and will continue the work at Nashville.

THE French Sleeping-Car Company has concluded arrangements with the different Continental railway companies by which a through train will be run from Calais to Vienna, thence branching off to Russia and the East. The carriages will consist solely of sleeping-cars, a restaurant, and a saloon, communicating by means of passages and platform. The time occupied in going from Paris to Vienna will be 27 hours.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND OF TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER books will be closed at 3 o'clock P. M. on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER,
Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY.
GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL OCTOBER 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE,
President G. & L. R. R. Co.

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.
One Second-hand "Tank" Narrow-Gauge Engine, 10 tons.
Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.
One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
Six new 4ft. 8 $\frac{1}{2}$ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.
Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.
Cars—Passenger and Freight Cars of all descriptions for early delivery.
Rails—16lb., 20lb., 30lb., 35lb. and 56lb. Rails.
Car Wheels and Axles.
Narrow-Gauge Rolling-stock a specialty.

BARROWS & CO.,
64 Broadway
NEW YORK.

F. W. DEVOE & CO.

Manufacturers of Fine

**RAILWAY VARNISHES,
COACH AND CAR COLORS**

Ground in Oil and Japan.
ETC., ETC.

Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. Devoe & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. Devoe & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

**Cor. of Fulton and William Sts.
NEW YORK.**

**Continuous
Automatic
FREIGHT BRAKES.**

**Requiring no other Connection
between Cars than the or-
dinary Coupling-Link
and Pin.**

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every car in the longest train, from the engine or caboose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

Any Railroad and manufacturing companies, or partible to co-operate with patentee in their manufacture and introduction, are invited to correspond with

WM. C. SCHULTZE,
Surgeon C. R. I. and P. Ry.
MARSHFIELD, Iowa Co., Iowa.

**NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD
HOOSAC TUNNEL ROUTE
WEST.**

6.30 A.M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, DETROIT AND CHICAGO.

**3.00 P.M. CINCINNATI
EXPRESS.**

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs via Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

**3.00 P.M. ST. LOUIS
EXPRESS.**

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

**BOSTON TO ST. LOUIS WITHOUT CHANGE!
ARRIVING AT 8.00 A.M. SECOND MORNING.**

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville, Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

**6.00 P.M. PACIFIC
EXPRESS.**

The only line running a through sleeping car via Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1883, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus (*) are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.	Markedthus (*) are leased roads.	Stock out-standing.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2	Little Miami.....50	4,637,200	quarterly	Sept. '82 2	Ware River*.....100	750,000	semi-an	July '82 3 1/2
Ashuelot.....100	210,000	quarterly	Oct. '81 3 1/2	Little Rock & Ft. S.100	4,065,735	quarterly	July '81 10	Warren (N. J.).....100	1,800,000	semi-an	Apl. '82 3 1/2
Atch., Top. and S. Ferro	54,000,000	quarterly	Nov. '82 1 1/2	Little Schuylkill*...50	2,646,100	semi-an	July '82 3 1/2	Warwick Valley.....100	340,000	semi-an	July '82 2 1/2
Atlanta and W. Point*100	1,232,200	semi-an	Jan. '82 6	Long Island.....50	10,000,000	quarterly	Nov. '82 1	Westchest'&L.H. prefco	821,300	semi-an	July '82 2
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3	Louisville & Nashv....100	19,130,913	semi-an	Feb. '82 3	West Jersey.....100	1,359,750	semi-an	Sept. '82 3
Augusta and Savan*100	1,082,000	semi-an	June '81 3 1/2	Lowell & Andover*...100	500,000	semi-an	Jan. '82 3 1/2	Wilmington'n'Weld'n'100	1,456,200	semi-an	July '82 3
Avon, Genesee & Mt*100	225,000	semi-an	July '81 3	Lykens Valley.....100	600,000	quarterly	Oct. '81 2 1/2	Wil., Col., & Ang.....100	960,000	semi-an	July '82 3
Baltimore and Ohio*100	14,792,566	semi-an	Nov. '82 5	Manchester & Law*100	1,000,000	semi-an	May '82 5	Winchester & Potow.*100	180,000	semi-an	July '82 3
" " pref.100	5,000,000	semi-an	July '82 3	Manhattan.....100	13,000,000	.....	.....	Winchester & Strasb.*100	74,700	semi-an	July '82 3
Washington Br.....100	1,650,000	semi-an	Nov. '82 5	" " 1st pref.100	6,500,000	quarterly	Oct. '82 1 1/2	Worcester & Nashua 75	1,789,800	semi-an	July '82 1 1/2
Berkshire*.....100	600,000	quarterly	Apr. '82 1 1/2	" " 2d pref.100	5,000,000	quarterly	Oct. '82 1 1/2				
Boston and Albany*100	20,000,000	quarterly	Sept. '82 2	Marietta & Cincinnati 50	1,286,350	.....	.....		
Bos. & N.Y. Airline pf.100	2,795,227	quarterly	June '82 1	" " 1st pref.100	8,105,600	semi-an	Sep. '86 3 1/2	Albany City.....100	200,000	annual	.... '80 5 1/2
Bos., Cl. F. & N.B. pref.100	1,750,100	semi-an	Oct. '82 3 1/2	" " 2d pref.100	4,440,000	semi-an	Sep. '86 3 1/2	Baltimore City.....25	1,000,000	semi-an	Oct. '82 3
Bos., Conc. & Mont. pf*100	800,000	semi-an	May '82 3	Marq. Hout. & Ont. pf.100	2,259,026	.....	.....	Balt., Cat. & El. Mills.100	.....	semi-an	July '82 2
Boston and Lowell*100	3,940,000	semi-an	July '82 2	Massawippi*.....100	400,000	semi-an	Aug. '82 4	Bleecker St. & Ful'y.100	900,000	semi-an	July '82 3
Boston and Maine*100	6,921,274	semi-an	Nov. '82 4	Metropolitan.....100	6,500,000	quarterly	Oct. '82 1 1/2	Boston & Chelsea pref.50	110,000	semi-an	Oct. '82 3
Boston & Providence*100	4,000,000	semi-an	Nov. '82 4	Michigan Central.....100	18,728,204	quarterly	Aug. '82 1	Broadway (Brooklyn)100	250,000	quarterly	Oct. '82 6
Attleborough Br.....100	131,700	semi-an	July '82 3 1/2	Middlesex Central.....100	280,000	semi-an	Aug. '82 3	B'way & 7th Av. (N.Y.)100	2,100,000	quarterly	Oct. '82 2
Bos., Revere B & Lynnroo	419,400	semi-an	July '82 3 1/2	Mill Creek & Minehill*50	323,000	semi-an	July '82 5	B'lynk & Hunter's Pt.100	400,000	semi-an	Oct. '82 6
Buffalo, N. Y. & Erie*100	950,000	semi-an	June '82 3	Missouri Pacific.....100	28,169,800	quarterly	Oct. '82 1 1/2	Brooklyn City.....100	2,000,000	quarterly	Ang. '82 3 1/2
Camden & Atlantic*50	377,400	quarterly	Nov. '82 3	Mobile & Montgomery100	3,022,517	semi-an	Feb. '80 2 1/2	Bushwick (Brooklyn)100	309,000	semi-an	Oct. '82 6
" " pref.50	880,650	quarterly	Nov. '82 4	Morris and Essex.....100	15,000,000	semi-an	July '82 3 1/2	Cambridge.....100	608,000	quarterly	Oct. '82 4 1/2
Camden & Burl. Co.100	381,925	semi-an	July '82 3	Mt Carbon & P't Carbon 50	282,350	semi-an	July '82 6	Cen. Park. N. & E. Riv.100	1,800,000	quarterly	Oct. '82 6
Canada Southern*100	15,000,000	semi-an	Feb. '82 1 1/2	Nashua and Lowell.....100	800,000	semi-an	July '82 4	Christoph'r & Tenth St.100	192,500	quarterly	Jan. '82 2 1/2
Cape May & Millville*50	447,000	semi-an	June '81 3 1/2	Nashua & Rochester.....100	1,305,800	semi-an	Oct. '82 1 1/2	Citizens' (Phil.).....50	200,000	annual	.... '80 14 1/2
Catawissa*.....50	1,159,500	annual	Oct. '81 5 1/2	Nashv. & Decatur.....100	1,827,000	semi-an	June '81 3	Citizens' (Phg.).....50	500,000	semi-an	Oct. '80 5
" " new pref.50	2,200,000	semi-an	May '82 3 1/2	Nash., Chat. & St. Louis 25	6,670,325	semi-an	Apl. '82 1 1/2	Coney Island & Bklyn*100	580,000	semi-an	July '82 6
Cayuga and Susq*50	580,110	semi-an	July '82 4	Naugatuck.....100	2,000,000	semi-an	July '82 5	Continental (Phil.).....50	1,200,000	quarterly	Oct. '82 6
Cedar Rapids & Mo. R*100	6,850,400	quarterly	Nov. '82 1 1/2	Nesquehoning Val*50	1,300,000	semi-an	Sep. '82 3	D. Dock, E. B'way & Batro 100	840,000	quarterly	Oct. '82 4
" " pref.100	760,600	semi-an	Aug. '82 3 1/2	N. Castle & Beaver Val*50	600,000	quarterly	Oct. '81 —	Eighth Av. (N. Y.)100	1,000,000	quarterly	Oct. '82 3
Central of Georgia*100	7,500,000	semi-an	June '82 4	New London North*n*100	1,500,000	quarterly	July '82 1 1/2	42d St. & G. St. Ferry100	747,000	semi-an	May '82 6
Central of New Jersey*100	18,563,200	quarterly	July '76 2 1/2	N. Y. Cen. & Hud.100	89,428,330	semi-an	Oct. '82 2	Frankl. & Southw. (Ph.)100	600,000	quarterly	Oct. '82 6
Central Ohio*.....50	2,437,950	semi-an	July '82 3	N. Y. and Harlem.....100	7,950,000	semi-an	July '82 4	Germantown (Ph.).....50	572,800	semi-an	Oct. '82 2 1/2
" " pref.50	411,550	semi-an	July '82 3	" " pref.100	1,500,000	semi-an	July '82 4	Grard College (Ph.).....50	500,000	semi-an	July '82 5
Central Pacific*100	59,275,500	semi-an	Aug. '82 3	N. Eastern (S.C.) prefco	86,000	semi-an	May '82 4	Grand St. & Newton100	150,000	quarterly	Oct. '82 1 1/2
Chemung*.....100	380,000	quarterly	July '81 1 1/2	N. Y. Lake Erie & West.100	77,083,000	.....	.....	Green & Coates (St. Ph.)100	299,387	semi-an	Jan. '82 3
Cheshire preferred*100	2,155,300	semi-an	July '82 1 1/2	" " pref.100	8,156,825	.....	.....	Heston, Mantan & F'm100	600,000	semi-an	July '82 4
Chicago and Alton*100	11,187,741	semi-an	Sept. '82 4	N. Y. H. & Hart.100	15,000,000	semi-an	Jan. '82 5	Highland.....100	200,000	semi-an	July '82 5
" " pref.100	2,245,200	semi-an	Sept. '82 4	N. Y. Prov. & Boston100	3,000,000	quarterly	Aug. '82 2	Lomb. & Southw. (Ph.)100	282,555	.....	.....
Chi., Bur. & Quincy*100	11,237,455	quarterly	Sept. '82 2	Niag. Bridge & Canand*100	1,000,000	semi-an	July '81 3	Orange & Newark.....100	124,744	.....	July '82 2
Chi., Iowa & Nebras*100	3,916,200	semi-an	July '82 4	North Carolina*.....100	3,000,000	semi-an	Sep. '81 3	People's (Phila.) pref.25	475,000	semi-an	July '82 4
Chi., Mil. & St. Paul.100	20,404,261	semi-an	Oct. '82 3 1/2	" " pref.100	1,000,000	semi-an	Sep. '81 3	Philadelphia City.....50	200,000	semi-an	July '81 3 1/2
" " pref.100	14,401,483	semi-an	Oct. '82 3 1/2	Northern N. Jersey*100	1,000,000	semi-an	July '82 2 1/2	Phila. & Darby.....20	308,000	semi-an	Jan. '82 6
Chi. & N. Western*100	14,988,257	semi-an	June '82 3 1/2	Norwich & Worcester*100	2,604,400	semi-an	July '82 5	Phig. Alleg. & Manches.50	300,000	quarterly	Oct. '81 3
" " pref.100	21,525,353	quarterly	Sept. '82 2	Ohio and Miss. pref.100	4,030,000	semi-an	July '82 3	Ridge Avenue (Ph.).....50	420,000	semi-an	Oct. '81 11
Chi., R. I. & Pacific*100	41,960,000	quarterly	Nov. '82 1 1/2	Old Colony.....100	7,333,800	semi-an	July '82 3	Second Avenue (N. Y.)100	1,190,500	semi-an	July '82 4
Chi. and West Mich.100	6,151,000	semi-an	Feb. '82 2 1/2	Oregon R'way & Nav.100	6,000,000	quarterly	Aug. '82 1 1/2	Second & Third St. (Ph.)100	771,076	semi-an	Jan. '82 4
Chi., St. P. M. & O. pref.100	10,390,000	quarterly	Oct. '82 1 1/2	Panama.....100	7,000,000	semi-an	July '82 4 1/2	17th & 19th sts (Ph.)100	250,000	semi-an	July '81 3
C., Ind., St. L. & Chi.100	6,000,000	quarterly	July '82 1 1/2	Paterson & Hudson*100	630,000	semi-an	July '82 4	Sixth Avenue (N. Y.)100	750,000	semi-an	May '82 5
Cin., Sand. & Clev. pf.100	429,037	semi-an	May '82 3	Paterson & Ramapo.100	248,000	semi-an	July '82 4	Somerville (Boston)100	113,000	semi-an	May '82 3
Clev. and Mahoning*100	3,759,200	semi-an	Nov. '82 3	Pember & Hightst'n*100	342,150	semi-an	Jan. '82 3	South Boston.....50	600,000	semi-an	July '82 4
Clev. and Pittsburg*100	11,244,336	quarterly	Sept. '82 1 1/2	Pennsylvania.....50	77,672,750	semi-an	May '82 4	Third Avenue, N. Y.100	2,000,000	quarterly	Ang. '82 5
Columbus & Xenia*50	1,786,200	quarterly	Sept. '82 2	Pennsylvania Co.100	20,000,000	semi-an	June '81 2 1/2	13th and 15th sts. Ph 50	334,520	quarterly	Jan. '82 4
Colum. & Hocking Val*100	2,500,200	semi-an	Aug. '81 208	Peoria & Bureau Val*100	1,200,000	semi-an	Feb. '82 4	23rd street, N. Y.100	600,000	semi-an	Aug. '82 4
Concord .....100	1,500,000	semi-an	May '82 5	Philadelphia & Erie*100	7,013,700	semi-an	.....	Union, Boston.....100	1,034,000	semi-an	Jan. '82 4
Concord and Ports.*100	350,000	semi-an	July '82 3 1/2	" " pdf.100	5,040,000	semi-an	Jan. '75 4	Union, Phila.....50	1,005,000	semi-an	Jan. '82 7
Conn. & Passump. Riv*100	2,244,400	semi-an	Aug. '82 3	Phil. Ger. & Norrist*100	2,231,900	quarterly	Sept. '82 3	West Philadelphia.....50	750,000	semi-an	July '77 1
Cumberland Valley*50	1,292,950	quarterly	Oct. '82 2 1/2	Phil. and Reading100	32,262,375	quarterly	Jan. '76 2 1/2				
" 1st pref.50	247,000	semi-an	Jan. '82 2 1/2	" " pref.100	1,551,800	quarterly	Aug. '82 1 1/2				
" 2d pref.50	243,000	semi-an	Oct. '82 2	N. Y. Lake Erie & West.100	7,083,000	.....	.....		
Dayton and Mich.*100	600,000	.....	Oct. '82 2	North Pennsylv.100	4,527,150	quarterly	Aug. '82 1 1/2				
" " pref.50	2,402,573	semi-an	Apr. '82 1 1/2	Northern Central.....100	6,142,000	semi-an	July '82 3	People's (Phila.) pref.25	124,744	.....	July '82 2
Delaware*.....25	1,648,940	semi-an	July '82 3	Northern N. Hampshire100	3,068,400	semi-an	June '82 2 1/2	Philadelphia City.....50	475,000	semi-an	July '82 4
Del. & Bound Brook*100	1,652,000	quarterly	Aug. '82 1 1/2	Northern N. Jersey*100	1,000,000	semi-an	July '82 2 1/2	Phila. & Darby.....20	200,000	semi-an	Jan. '82 6
Del., Lack. & Western100	26,200,000	quarterly	Oct. '82 2	Norwich & Worcester*100	6,704,900	semi-an	July '82 5	Phig. Alleg. & Manches.50	300,000	quarterly	Oct. '81 3
Denver & Rio Grande*100	29,160,000	quarterly	Jan. '82 1 1/2	Ohio and Miss. pref.100	4,030,000	semi-an	July '82 3	Ridge Avenue (Ph.).....50	420,000	semi-an	Oct. '81 11
Den., South P. & Pac.100	3,500,000	.....	Aug. '80 4	Portl., Saco & Portsmouth100	1,500,000	quarterly	Aug. '82 1 1/2	Second Avenue (N. Y.)100	1,124,744	.....	July '82 4
Detroit, Lans. & Nor.100	1,825,600	semi-an	Aug. '82 2	Providence & Worces.100	2,000,000	semi-an	Aug. '82 2	Second & Third St. (Ph.)100	771,076	semi-an	Jan. '82 4
" " pref.50	2,508,380	semi-an	Feb. '82 2	Rensselaer & Saratog.*100	7,000,000	semi-an	July '82 4 1/2	17th & 19th sts. Ph 50	250,000	semi-an	May '82

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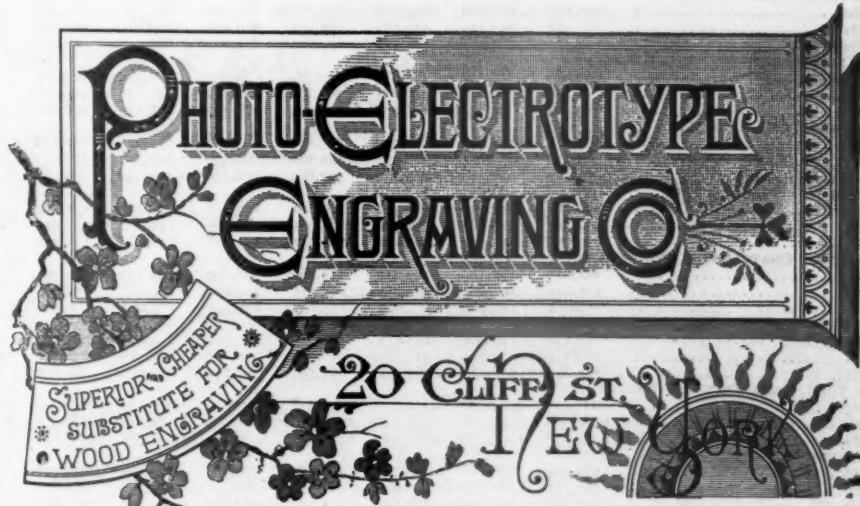
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RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	
BURL., CEDAR RAP. & NORTHERN:														
1880.....	184,316	165,170	188,345	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484	
1881.....	167,750	124,510	148,551	184,080	165,630	205,912	174,351	221,801	221,748	203,880	231,812	2,259,037		
1882.....	252,823	225,631	224,107	178,304	199,278	211,257	188,276	224,921	201,439	.....	.....	.....
CENTRAL PACIFIC:														
1880.....	1,200,615	1,070,487	1,373,428	1,356,716	1,778,488	1,724,990	1,840,067	1,973,438	1,994,997	1,120,329	2,199,466	1,905,221	20,508,113	
1881.....	1,602,907	1,454,288	1,709,638	1,872,370	2,091,411	2,159,382	1,899,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101	
1882.....	1,839,469	1,720,675	1,699,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,147,400	.....	.....	.....
CHESAPEAKE AND OHIO:														
1880.....	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308	
1881.....	162,540	184,389	228,479	227,343	252,235	241,135	225,060	262,858	247,144	237,303	235,585	203,562	2,702,702	
1882.....	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	305,065	.....	.....	.....
CHICAGO AND ALTON:														
1880.....	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	606,776	574,695	7,718,108	
1881.....	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	774,790	750,359	680,133	635,307	7,553,988	
1882.....	570,447	530,480	584,483	501,787	553,412	613,886	671,537	800,624	881,109	.....	.....	.....
CHICAGO AND NORTHWESTERN:														
1880.....	1,154,632	1,131,683	1,361,725	1,294,573	1,875,605	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,623	1,477,902	19,416,007	
1881.....	1,240,664	993,202	1,178,795	1,474,612	1,879,006	2,306,440	1,983,032	2,315,164	2,392,676	2,341,098	2,019,038	1,855,477	21,849,209	
1882.....	1,644,935	1,474,176	1,679,933	1,608,471	2,110,947	2,022,700	2,055,736	2,099,755	2,497,053	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:														
1880.....	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494	
1881.....	1,307,048	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,262,988	2,031,001	1,816,133	1,905,490	21,324,150	
1882.....	1,658,834	1,457,300	1,566,217	1,530,838	1,505,465	1,437,164	1,625,006	2,086,858	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:														
1880.....	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119	
1881.....	990,847	682,717	916,989	1,259,946	1,538,491	1,726,811	1,568,706	1,678,301	1,644,676	1,590,000	1,569,000	1,855,000	17,025,462	
1882.....	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:														
1880.....	193,827	173,078	259,783	259,728	232,208	232,146	218,093	236,995	251,013	300,833	342,052	342,804	312,173	3,122,097
1881.....	257,786	158,594	251,048	261,211	350,124	404,562	383,202	385,586	373,370	382,714	380,733	391,950	3,981,296	
1882.....	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:														
1880.....	155,697	172,543	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185	
1881.....	182,523	171,511	191,005	183,710	191,061	192,299	177,161	229,858	228,653	212,606	194,805	192,623	2,296,916	
1882.....	200,042	186,879	208,066	204,269	199,110	195,948	209,564	259,379	.....	.....	.....	.....
DENVER AND RIO GRANDE:														
1880.....	124,759	126,922	160,883	164,882	193,925	205,455	207,132	400,133	406,583	473,318	408,562	349,196	3,478,007	
1881.....	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812	
1882.....	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,366	.....	.....	.....
HANNIBAL AND ST. JOSEPH:														
1880.....	176,079	166,965	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366	
1881.....	154,404	122,874	176,356	190,812	172,950	190,740	210,899	210,240	215,103	213,433	201,762	180,376	2,330,661	
1882.....	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	.....	.....	.....
ILLINOIS CENTRAL:														
1880.....	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,866	880,211	783,120	673,182	8,304,812	
1881.....	631,281	524,499	557,789	662,493	673,259	803,887	720,040	808,407	828,847	815,238	737,218	703,475	8,380,397	
1882.....	728,173	689,387	695,371	674,603	674,749	752,251	813,600	828,238	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:														
1880.....	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079	
1881.....	90,283	83,261	192,085	203,077	200,064	109,846	109,125	272,174	247,932	181,674	160,826	156,697	.....
1882.....	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	273,120	.....	.....	.....
LOUISVILLE AND NASHVILLE:														
1880.....	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346	
1881.....	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,153,779	11,344,301	
1882.....	964,527	960,315	1,068,836	953,603	958,130	1,215,490	1,038,385	1,030,385	1,107,985	.....	.....	.....
MOBILE AND OHIO:														
1880.....	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,373,622	
1881.....	224,347	216,768	230,916	163,551	145,803	136,517	135,549	160,789	210,262	256,924	262,986	258,812	2,403,224	
1882.....	159,076	158,590	148,166	141,957	134,378	136,184	140,443	160,031	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:														
1880.....	205,633	191,154	169,457	155,466	158,839	144,155	151,594	150,430	168,317	170,979	172,121	152,059	1,775,256	
1881.....	178,143	190,866	207,710	183,585	184,430	154,549	150,430	168,317	168,999	168,999	168,999	168,999	.....
1882.....	156,994	159,961	161,005	154,155	137,645	119,074	160,991	168,304	168,999	.....	.....	.....
NEW YORK AND NEW ENGLAND:														
1880.....	164,923	149,907	183,845	179,689	183,703	219,891	205,056	249,885	235,642	215,491	210,856	198,108	2,363,255	
1881.....	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255	
1882.....	213,840	217,261	205,222	263,544	283,244	290,060	308,920	338,490	338,490	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:														
1879.....	1,147,173	1,207,391	1,356,780	1,372,755	1,250,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127	
1880.....	1,296,381	1,252,218	1,644,958	1,643,152	1,592,544	1,661,812	1,580,544	1,066,812	1,766,417	1,899,910	1,799,338	1,726,788	19,149,361	
1881.....	1,443,437	1,425,7												

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MONTROSE, Susquehanna Co., PA.**SWIFT'S IRON AND STEEL WORKS,**

No. 26 West Third Street,

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Manufacturers of all Weights of Standard and Narrow Gauge Rails by the most approved process. Also Rail Fastenings, Steel and Bloom Boiler Plate, and Tank, Sheet, and Bar Iron.

**STEEL
CASTINGS****CHESTER STEEL CASTING CO.**
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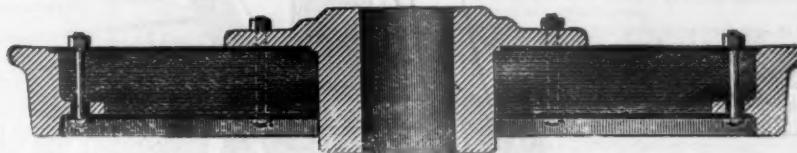
Works, CHESTER, Pa.

FROM 1-4 TO 10,000 lbs. WEIGHT.

True to pattern, sound and solid, of unequalled strength, toughness and durability. An invaluable substitute for forgings or cast-irons requiring three-fold strength. CROSS-HEADS, ROCKER-ARMS, PISTON-HEADS, ETC., for Locomotives. 15,000 Crank Shafts and 10,000 Gear Wheels of this steel now running prove its superiority over other Steel Castings. CRANK-SHAFTS, CROSS-HEADS and GEARING, specialties. Circulars and Price Lists free. Address

ALLEN PAPER CAR WHEEL COMPANY,

GENERAL OFFICES: 240 BROADWAY, NEW YORK.



Manufacturers of Allen's Patent

**—PAPER CAR WHEELS,—
(ALL SIZES).**

Especially adapted for Sleeping and Drawing Room Cars, Locomotive and Tender Trucks, Steel Tire, with annular web—strongest, most durable and economical wheel in use. Works at Hudson, N. Y.; and at Pullman (near Chicago) and Morris, Ill.

A. G. DARWIN, Pres.

C. H. ANTES, Sec'y.

J. C. BEACH, Treas.

**THE USE OF THE
McLEOD AUTOMATIC AIR RAILROAD SIGNAL****Will prevent Railroad Accidents and Save Life.**

"The McLeod Air Signal is an ingenious and inexpensive device by which the coming of a train is announced far in advance, both by visible and audible signals." [Mass. R. R. Com. Report.]

This signal has been fully tested on the New York and New England Railroad at Dudley and Bird Streets, by practical operation, and has proved a complete success, to the entire satisfaction of the many prominent Railroad men and experts who have watched and examined it. It provides an Automatic Block, Crossing, Station, Switch, Bridge, Yard and Curve Signals, Gate and Revolving Lanterns. Being operated by the weight of trains passing over an incline bar, forcing common air through a tube, by means of a bellows, which is positive in its action, it is highly commended by all railroad officials who examined it.

The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

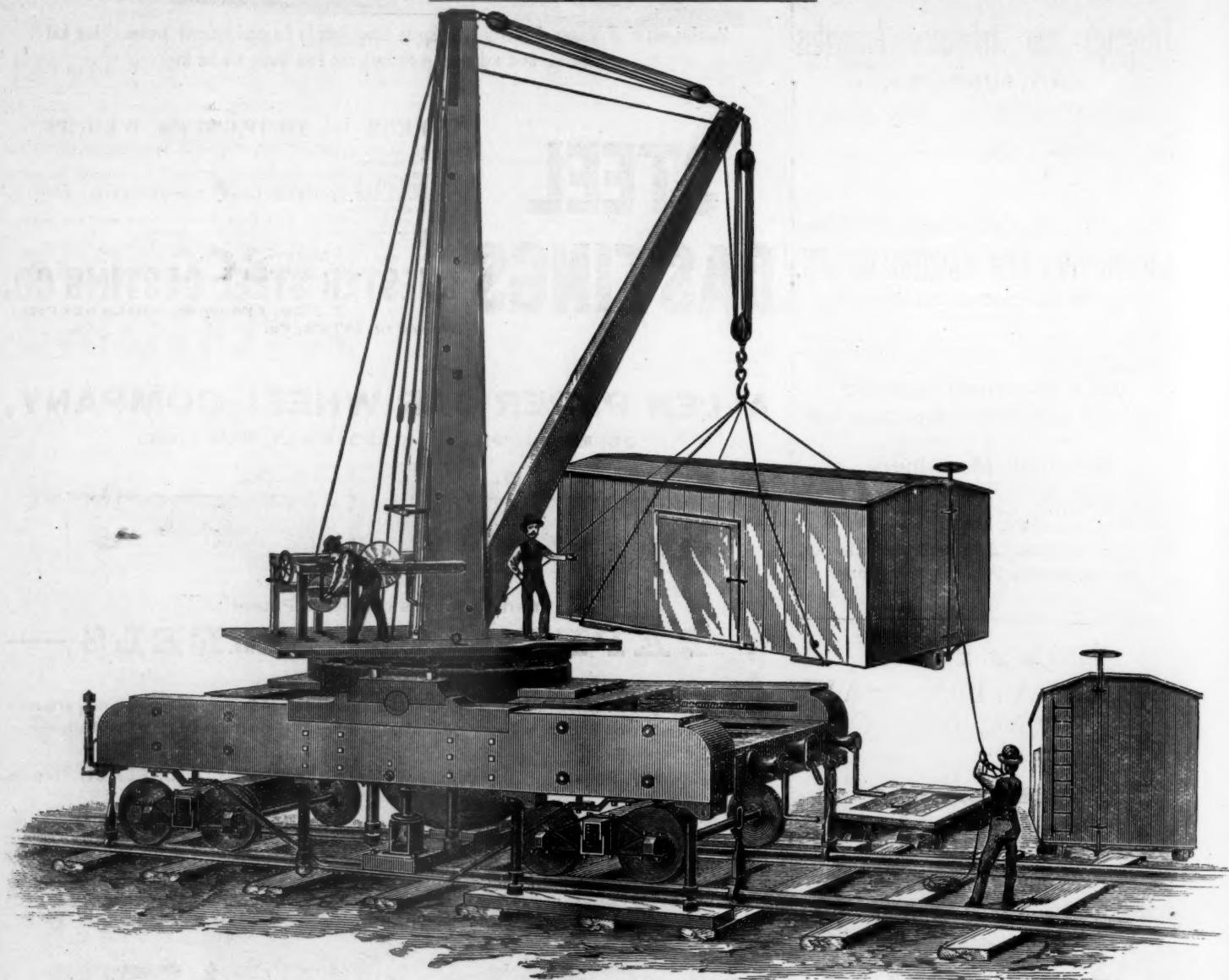
MCLEOD [AIR] RAILROAD SIGNAL CO.,

4 Pemberton Square, Boston, Mass.

New York Office with Col. Thos. R. Sharp, 115 Broadway

THE JEWETT WRECKING CAR.

THE CONTINENTAL CONSTRUCTION COMPANY.



In a recent letter in relation to the Manufacturers' and Mechanics' Institute Fair, now being held in Boston, our regular correspondent mentioned the model of the JEWETT WRECKING CAR, in the exhibit of the Continental Construction Company. We have since had an opportunity to examine the car and to talk with Mr. Jewett, its inventor, and feel that a fuller description of the car will be of interest to all of our readers. We publish a large cut, which will be readily understood. The car, which is heavily built, and in every way specially adapted for heavy work, is provided with a tipping counterbalanced mast and connected boom, which are mounted on a turn-table. The mast, which is 35 feet in length, and very strongly built and secured by bolts of iron, is so arranged that for transportation it can be lowered to an almost horizontal position, thus enabling it to pass under bridges; while owing to the counterbalance weight no power is needed to raise it to a perpendicular when the scene of operations is reached. The hoisting gear is very strong and simple, but so arranged as to secure the

greatest possible return for outlay of power. The car is fitted with patent grips to secure it firmly to the track, and on each side are four jack-screws which are hinged to the car, and in transportation are simply lifted up and placed in "beackets." To secure a solid bed for the jack-screws four pieces of timber are carried, which are provided with clamps to secure them to the track. These rest upon the ends of the ties when in use. It will be readily seen that these jack-screws give the derrick an absolutely firm foundation, and prevent any tipping of the car when heavy weights are lifted. Under the turn-table is a platform which is adjustable so as to rest upon the tracks, thus giving increased stability and taking the weight from the car. In fact every possible precaution seems to have been taken to guard against any "give" in any part under any strain from any direction.

With the Wrecking Car is a tender or tool car, which provides ample stowage room for tools, and at the same time forms a receptacle for the head of the mast.

The car is provided with braces which can be set so as to take the strain when anything is to be pulled toward the car before lifting, as is frequently necessary when a train has gone over an embankment and the cars or freight have rolled to some little distance.

We certainly regard the Jewett Wrecking Car as an unusually perfect invention of its kind, and believe that railroad men will feel amply repaid for the time spent in examining it. It would seem as if it could not fail to at once come into general favor, both on account of its completeness in all details and the ease and rapidity with which it can be made ready and put into operation, either in case of a wreck or in ordinary construction work, where strength and an efficient portable derrick are required.

The Continental Construction Company are also the sole manufacturers of BEAN'S ADJUSTABLE SWING BED PLANER, which has special points of interest to railroad men and bridge companies from the fact that it is adapted to planing timber of any thickness from one-eighth

(Continued on page 846).

AMERICAN Railroad Journal.

SUBSCRIPTION PRICE REDUCED
—FROM—
\$5 to \$3.

The American Railroad Journal,
WITH ITS VARIETY OF
New Departments,
AND ITS
NEW DRESS,
HAS ASSUMED NEW PROPORTIONS.

We are amply justified in reducing the price from its old time rate of \$5.00 per year to \$3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers. It is gratifying to us to know that the alterations made in the Journal during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our readers favor this department with suitable contributions.

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for \$1. Try it, and you will be glad to continue taking it.

SOLE MANUFACTURERS OF IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS,

which form non-metallic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

Office and Factory, Wilmington, Del.

THE COST OF ADVERTISING

For any responsible advertiser, making application in good faith, we prepare and furnish a written estimate, showing the cost of any proposed advertising in the leading Newspapers of the United States and Dominion of Canada.

We prepare and exhibit printed proofs of any proposed advertisement.

For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transact his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

When an advertiser does not know what he wants or what he ought to do, he can designate some sum of money within which he wishes to limit his expenditure; this will enable us to prepare for him such a list of papers as will be the best for his purpose, within the limits which he prescribes.

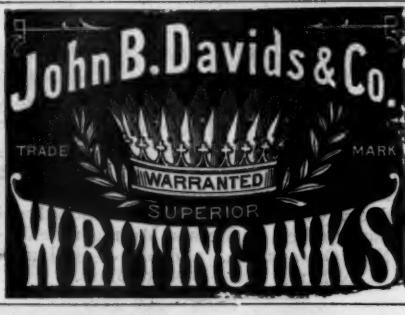
Send 25c. for 100-page pamphlet. Address

GEO. P. ROWELL & CO.

Newspaper Advertising Bureau,

(Printing House Square,
Opposite Tribune Building,)

10 Spruce St., New York.



THE JENKINS STANDARD PACKING
is acknowledged by users as the *Best* in the world. Unlike all other Packings, the Jenkins Standard Packing can be made any thickness desired in a joint by placing two or as many thicknesses together as desired, and following up joint it vulcanizes in place and becomes a metal of itself (it is frequently called Jenkins Metal), and will last for years, as it does not rot or burn out. Avoid all imitations, as a good article is always subject to cheap imitations. The genuine has stamped on every sheet, "Jenkins Standard Packing," and is for sale by the Trade generally. Manufactured only by

JENKINS BROS.,
Proprietors JENKINS PATENT VALVES, PACKING, &c.
71 JOHN ST., NEW YORK.
104 Sudbury St., Boston.

DODGE & SINCLAIR.

MANUFACTURERS OF

Rubber and Leather BELTING,

RUBBER HOSE PACKING,
TUBING, SPRINGS,
GASKETS, Etc.

RUBBER CLOTHING, LACE
LEATHER, BELT HOOKS,

RAILROAD, MINING, AND
MILL SUPPLIES.

No. 21 Park Place,
NEW YORK.

of an inch to sixteen inches, and in width to thirty inches, and has a capacity of from 2,500 to 3,500 feet per hour. It is a well recognized fact that a bridge which is painted will long outlast an unpainted one, but the expense and difficulty of *thoroughly* painting unplaned timber have been great drawbacks. As a planer is now made capable of planing large timbers, much of the trouble is at once removed. This Company are in possession of many commendatory letters, and feel that BEAN'S ADJUSTABLE SWING BED PLANER supplies a long-felt want. They are now able to supply on demand the regular sizes, and will soon be in a position to fill all orders for the extra sizes. The CONTINENTAL CONSTRUCTION COMPANY's works at Concord, N. H., include the buildings lately used as the Concord State Prison, to which they have largely added, so that they now have two shops 24x48 feet and two 64x31 feet, with blacksmith shop, etc., all fitted with the most approved machinery and all modern appliances. They do a large business, both in manufacturing for themselves and for other dealers, and their works are well worth a visit.

Automatic Car Coupler.

We append a brief description of an invention by Mr. F. P. STEBBINS, of Collins, Mich., who has secured letters patent for its protection. He claims that his coupler is simpler in its mechanism, quicker in its action, cheaper in its construction and easier to adopt than any other. Coupling is practicable and easier by its use without the link and pin, when with like drawbars as itself; and only link and pin are necessary when coupling with other drawbars. While the engineer does all the coupling with his engine, by pushing the cars together, he is not annoyed by delays consequent upon mis-couplings, nor obliged to wait for brakemen to run from five to thirty rods before a coupling can be made. He will be somewhat disappointed in breaking drawbars, because these can only be broken on a pull, and not by the usual method of slamming cars together. Being made in the arrow head form, having catch-shoulders above and below—it is immaterial which drawbar goes above or below—a coupling is insured. The catch-shoulders being laterally convex from side to side, a corner engagement and side-wise pull on bends or curves of the track are avoided. The shank is flattened, and on each side of it is a longitudinal horizontal flange of sufficient width to make the full breadth of the shank equal to or larger than the head. By means of these flanges the drawbar is held in proper position so that it will not strike the bumpers of the car-frame in its movements, and need not be of excessive weight. The rear portion of the drawbar is not fastened differently from those now in use, excepting that the guide plates and the cross-bar which hold up the head should be lowered several inches to allow the heads sufficient room to couple and uncouple easily.

The uncoupling attachment is a transverse shaft arranged horizontally in bearings on the car frame, and extends over the center of the drawbar. From the drawbar, directly underneath the shaft, is a piece of chain several inches in length which securely fastens the

drawbar and shaft together. In uncoupling cars, the handles of the shaft are turned about one revolution, which winds the chain around the shaft elevating the upper drawbar sufficiently high to disconnect the catch-shoulders on each drawbar. When cars are very uneven in height the lower drawbar can be raised by said chain; and the ratchet wheel fastened to the shaft with a catch will hold said lower drawbar on an equal height with the upper drawbar, thus solving the problem of coupling cars of uneven height. Bumpers are used to keep the cars apart like those employed on the New York, Lake Erie and Western, and the Delaware, Lackawanna and Western railroads.

The "Little Giant" Jack.

MESSRS. I. & D. W. SHONDY, of Paw Paw, Ill., have been granted a patent on their "Little Giant" Jack, which is in considerable use, although on the market but a few months. The claim is made for it that it will raise the track in one-third of the time required by other jacks, and that it can raise from the thirtieth part of an inch to any height required. It is made in a single or double form. In the single form the jack consists of two standards, and it sets with one of these on each side of the rail. There are three pulleys at the top of the standard and a double pulley at the bottom. The pulley at the bottom is provided with a dog which grabs the rail. A chain is fastened at the top of the pulley block, which passes upwards and over the pulleys in the top of the standard, and back down through the pulley block. The chain then passes back again over the pulleys in the top of the standards, and finally to a winding shaft, which is turned by means of a double crank or lever. While strong and durable, the new jack is a light machine. The patentees announced their readiness to give any further information required, which is also supplied by Messrs. Minnigerode & Co., of New Orleans, La., and Mr. J. H. Langley, No. 8 Exchange place, Boston, Mass.

MAJOR R. W. PITRIKEN, chief engineer of the Mexican and Oriental Railway, was murdered by Indians, in the mountains near Chihuahua.

Anthracite Coal Tonnage.

The following is an official statement of the anthracite coal tonnage for the month of September, 1882, compared with the same month in 1881:

	1882.	1881.
Philadelphia and Reading Railroad.....	644,541	655,466
Lehigh Valley Railroad.....	497,360	504,739
Central Railroad of New Jersey.....	351,814	360,608
Delaware, Lackawanna and Western.....	400,313	380,013
Delaware and Hudson Co.....	282,097	292,373
Pennsylvania Railroad.....	227,876	196,698
Pennsylvania Coal Co.....	128,608	144,627
New York, Lake Erie and Western Railroad.....	30,830	43,293
Total.....	2,558,443	2,588,218

The following is the statement for the year 1882, compared with the year 1881:

	1882.	1881.
Reading Railroad.....	2,899,124	4,938,351
Lehigh Valley Railroad.....	4,237,307	4,025,782
Central Railroad of New Jersey.....	3,068,629	2,938,125
Delaware, Lackawanna and Western.....	3,343,632	3,128,327
Delaware and Hudson Canal.....	2,240,983	2,100,055
Pennsylvania Railroad.....	1,747,105	1,637,284
Pennsylvania Coal.....	1,045,970	1,037,621
New York, Lake Erie and Western Railroad.....	195,493	355,816
Total.....	20,778,246	20,361,363

The stock of coal on hand at tide-water shipping points, September 30, 1882, was 513,934 tons; on August 31, 1882, 603,042 tons, decrease 89,108 tons.

There were exported from the United States last year 99 locomotives, 11,697 car wheels, and 2,164,648 pounds of iron rails.

THE German Government has adopted a new regulation on its lines of railway. In future the carriages will be painted of the same color as the tickets of the different classes—first, yellow; second, green; third, white.

At the annual meeting of the Cincinnati Sandusky and Cleveland Railroad Co., at Sandusky, Ohio, on the 18th inst., George Wilshire, Cincinnati, John W. Russell, Sandusky, and Asa Bushnell, Springfield, were elected directors for three years. The directors elected the following officers: J. S. Farlow, Boston, president; N. W. Pierce, Boston, vice-president; J. L. Moore, Sandusky, secretary and treasurer; A. P. Simpson, Boston, assistant treasurer and transfer agent.

The D. K. Miller Improved Padlock.

SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.

UNPICKABLE, NO RUSTING OR CORRODING.



Shown by general use to be the best Padlock in the Market for Railway Cars, Switches, Tool Boxes, and for all other purposes for which padlocks are used.

Every Padlock with a different Key and Master Key to unlock them all; or all Padlocks with same key if required.

Send for Circulars with Details and Prices.

FAIRBANKS & COMPANY, Agents,

Philadelphia, Baltimore, New Orleans, NEW YORK. Buffalo, Pittsburgh, Albany.

THE SALMON CAR HEATER



"36 per cent of coal saved and the car kept noticeably warmer!"

by using THE SALMON CAR HEATER.

It Insures Safety from Fire in case of Accident,

Economy in Fuel and RAPID CIRCULATION.

It heats quickly, is SELF-REGULATING,

and can be used for

either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

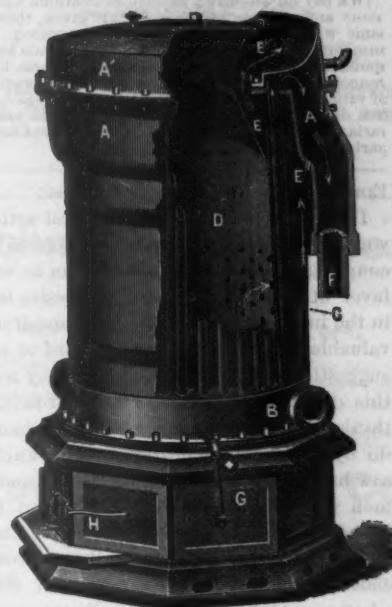
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

CORRESPONDENCE SOLICITED.

The Salmon Heater Co.

OFFICE, 35 CONGRESS STREET, BOSTON, MASS.



Established 1863.
MOLLER & SCHUMANN
Manufacturers of Fine
COACH AND CAR VARNISHES.
BROOKLYN, N.Y., U.S.A.



**STEEL
CAR
PUSHER**

MADE ENTIRELY OF STEEL
ONE MAN with it can easily
move a loaded car.
Manufactured by E. P. DWIGHT,
DEALER IN RAILROAD SUPPLIES,
407 LIBRARY ST.,
PHILADELPHIA.

ESTABLISHED IN 1836.

LOBDELL CAR WHEEL COMPANY,
Wilmington, Delaware.

GEORGE G. LOBDELL, President.
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First-Class English
IRON AND STEEL RAILS
AT LONDON PRICES, F. O. B.

We also purchase all classes of Railroad Securities
and negotiate loans for Railroad Companies.

Wm. A. Guest & Co.,
MECHANICS' BANK BUILDING,
Nos. 31 and 33 Wall Street, - New York.

SAFETY RAILROAD SWITCHES,
WITH MAIN TRACKS UNBROKEN.

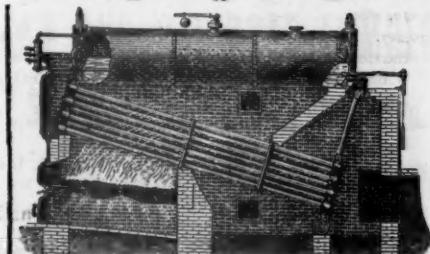
Railroad Crossings, Frogs, and other Railroad Supplies,

MANUFACTURED BY THE

WHARTON RAILROAD SWITCH CO.,
PHILADELPHIA.

Works: 23d and Washington Avenue.
Office: 28 South 3d Street.

WATER TUBE STEAM BOILERS.



THE BABCOCK & WILCOX CO.,
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HILL'S IMPROVED TICKET PUNCHES

Were Awarded Gold Medals
At the Melbourne International Exhibition, Australia,
1880, and at Adelaide, 1881.

PATENTED

NOV. 7,
1876.



Suitable for any

ticket in use.

No. 3 Punches adapted for limited and duplex tickets, also B C $\frac{1}{2}$ and L Punches, six styles; the most perfect and durable in use. Before purchasing, send for descriptive catalogue giving full list.

WARREN HILL, Manufacturer,
232 Friend Street, Boston, Mass.

A FREE GIFT.

Any of our readers who will enclose two 3 cent stamps in a letter to the **Columbus Buggy Co., Columbus, O.**, will receive in return a beautiful engraving in colors, representing an **Australian scene**, and their manner of traveling in that country with **Ostriches** as a motor. They give this picture (the packing costing six cents) to all who may send for it, desiring in this manner to make themselves more widely known to the people.

[Mention this paper.]

CORRESPONDENCE.

(We pay no attention to communications unless the name and address of the writer are given, though the same will not be published if so requested. We assume no responsibility for statements made by correspondents, and we do not necessarily endorse ideas advanced by them. Under these conditions we think it of value to our readers to devote a liberal space to the free discussion by others—whose opinions may be at variance with our own—of subjects pertinent to our department of journalism.)

EDITOR AMERICAN RAILROAD JOURNAL:

DEAR SIR:—I have noticed several articles in your JOURNAL relating to improvements in car-couplings. While it is not my aim to write in favor of any patentee, it is my desire to write in the interest of my fellow-men, and if in your valuable paper I may drop a word or make a suggestion that will have a tendency to check this death rate of laborers on railroads, I will think that I have done more good than I can do by dissecting their limbs. The knife and saw have been used too long. Too many women and children have been driven to the frozen door of starvation. The people demand, in the interest of humanity, that railroad officials take some measures to prevent it. Perhaps a better arrangement for coupling cars can be secured by appointing a committee to examine the various improvements in car-couplings recently granted and recommend the best for adoption. Let a time be set, an invitation be given to the patentees to appear and exhibit their invention, in model form, and a free pass be given to all the inventors to and from the place of meeting. Should such steps be taken I venture the assertion that the day is not far distant when the present death traps will only be known as things *that were*. Yours truly,

J. R. WELCH, M.D.

SPENCERVILLE, O., Oct. 19, 1882.

Hudson River Tunnel.

Work on the Hudson River Tunnel is being steadily pushed forward, and by Nov. 1 the large air compressor now building for the tunnel by the Clayton Steam Pump Works of Brooklyn, N. Y. (three of whose compressors have been used since the commencement of the tunnel), will be placed in position and working at the foot of Morton street, New York. This air compressor is of the Clayton Improved Duplex pattern, having two 22-in. diameter steam cylinders, two 24-in. diameter air cylinders and 30-in. stroke. It is 20 ft. in length, 10 ft. in width; weighs 25 tons; and its working capacity is 3,750,000 cubic feet of air per 24 hours.—*Engineering News*.

THE bridge of the Mexican National Railway over the Rio Grande at Laredo is now rebuilt, and traffic fully resumed. The gross earnings for the first week from Corpus Christi to Monterrey—333 miles—were \$17,300. The running expenses about 56 per cent.

"BEDAD, Pat, wud yes luk at 'em now?", said Mike, who was gazing intently at a procession honoring St. Patrick's Day in the march. "See, now, the fellows phat drinks the whuskey all on fut, and the fellows phat sells it all a' roidin'."

IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible. The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns. The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions. We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same. All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

List of Recent Patents for Inventions Relating to Railway Interests.

- 265,958. Safety Guard for Railways: Philonzo F. Given, Cedar Rapids, Iowa. Filed Nov. 15, 1881.
- 265,965. Car Wheel: Edward E. Josef, Buffalo, N. Y. Filed March 13, 1882.
- 265,977. Car-Coupling: John S. Owen and George H. Snider, North Indianapolis, Ind. Filed March 7, 1882.
- 265,987. Hand Car: George S. Sheffield, Three Rivers, Mich., assignor to the Sheffield Velocipede Car Company, same place. Filed July 17, 1882.
- 265,999. Railroad Track Gauge and Level: Francis A. Watson, Bainbridge, Ind. Filed June 30, 1882.
- 266,027. Magnetic Electric Railway Signal: Wesley W. Gary, Boston, Mass. Filed June 1, 1881.
- 266,061. Car Wheel: Frederick H. Smith, St. Denis, Md. Filed August 26, 1882.
- 266,097. Railroad Signal: Joseph A. I. Claudon, Titusville, Pa. Filed April 17, 1882.
- 266,103. Locomotive Driving Car: William Crippen, Cadillac, Mich. Filed August 12, 1882.
- 266,138. Car-Coupling: Nathan M. Hale, Grand View, Tex. Filed April 18, 1882.
- 266,163. Railroad Signal: J. Miller Kelly, Rochester, N. Y. Filed May 10, 1882.
- 266,165. Nut Lock: William C. Ladd, Kingsley, Fla. Filed July 18, 1882.
- 266,190. Stock-Car: George F. Oehrl, Belle Vernon, Pa. Filed March 9, 1882.
- 266,195. Track Lifter and Holder: Alexander C. Phillips, New Castle, Pa. Filed March 25, 1882.
- 266,202. Car-Coupling: Cyrus Roberts, Three Rivers, and H. Duane Brockway, Detroit, Mich. Filed May 9, 1882.
- 266,203. Car Reflector: Chas. Robinson, Cambridgeport, Mass. Filed April 1, 1880. Renewed May 9, 1882.
- 266,260. Car-Brake: Henry Barratt, York, Pa., assignor of one-third to Jacob D. Miller, same place. Filed Feb. 17, 1882.
- 266,217. Railroad Switch Signal: Augustus H. Baker, Hartford, assignor one-half to Henry L. Pinney, South Windsor, Conn. Filed April 20, 1882. Original No. 229,075, dated June 22, 1880.
- 266,272. Guide for Engine Cross-Heads: Francis W. Dean, Cambridge, Mass. Filed Aug. 8, 1882.
- 266,297. Railway Signal Apparatus: Joseph P. Livermore, Boston, Mass. Filed Feb. 13, 1882.
- 266,311. Fire Extinguisher for Railroad Cars: H. Purdy, Burlington, Iowa. Filed April 6, 1882.
- 266,322. Railway Car: Charles S. Smith, Bath-on-the-Hudson, N. Y. Filed April 13, 1882.
- 266,323. Adjustable Hood for Car Platforms: Charles S. Smith, Bath-on-the-Hudson, N. Y. Filed April 13, 1882.
- 266,392. Stock Car: Samuel W. Remer, Bridgeport,

Conn., assignor to Child & Oliver, New York, N. Y. Filed June 12, 1882.

- 266,427. Spark Arrester: Joseph W. Budd, New York, N. Y. Filed Nov. 23, 1881.
- 266,464. Railroad Spike: Howard Greer, Chicago, Ill., assignor of one-half to George H. Christy, trustee, Sewickley, Pa. Filed Mar. 3, 1882.
- 266,472. Car-Coupling: William H. Heaverlin, St. Louis, Mo., assignor of one-half to William H. Calvert, same place. Filed July 31, 1882.
- 266,512. Car-Coupling: John D. Perry, Naperville, Ill., assignor of one-half to Jasper L. Dille, same place. Filed July 31, 1882.
- 266,537. Car-Coupling: Lewis Seitz, Bloomville, Ohio. Filed Sept. 21, 1882.
- 266,551. Locomotive Boiler: George S. Strong, Philadelphia, Pa. Filed Aug. 28, 1882.
- 266,558. Car-Coupling: Arthur M. Trude and William Gray, Hartford, Conn., assignors of one-third to Chas. H. Cooley, same place. Filed July 28, 1882.
- 266,563. Car-Coupling: Gustave Wallenberg, Chicago, Ill. Filed Aug. 5, 1882.

ORGANIZATION.

THE officers of the Boston Mining and Stock Exchange, elected on the 19th inst., are: President, E. D. Goodrich; vice-president, W. J. Mann; treasurer, C. H. Smith; secretary, Paul Sutorius.

At the annual meeting of the stockholders of the Vermont and Canada Railroad Company, held at Bellows Falls, Vt., on the 19th inst., the following directors were chosen: Charles E. Billings, Francis A. Brooks, John D. Bryant, Albert Clarke, Thomas F. Clary, Alfred S. Hall and William H. Webb.

THE directors of the American District Telegraph Co., elected on the 19th inst., are: Thos. C. Platt, John F. Pattison, Thos. T. Eckert, C. M. Depew, A. B. Johnson, Jay Gould, D. H. Bates, Wm. F. Drake, F. B. Wallace, W. C. Humstone, D. N. Crouse, H. K. Sheldon, and C. A. Tinker. The Board organized by electing Thos. T. Eckert, president, and D. H. Bates and W. F. Drake, vice-presidents.

At the annual meeting of the stockholders of the Columbus, Springfield and Cincinnati Railroad Co., at Columbus, Ohio, on the 20th inst., the following directors were elected: J. S. Farlow, N. W. Pierce, and J. D. Farnsworth, of Boston; J. D. Chamberlain and J. L. Moore, of Sandusky; J. H. Thomas, of Springfield; and J. A. Jeffrey, of Columbus. The board elected as officers, J. S. Farlow, president; J. D. Farnsworth, vice-president; J. L. Moore, secretary and treasurer, and A. P. Simpson, assistant treasurer and transfer agent at Boston.

At the annual meeting of the stockholders of the Edison Electric Light Company on the 20th inst., the following board of directors was elected to serve for the ensuing year: Norvin Green, S. P. Eaton, G. P. Lowrey, Thomas A. Edison, E. P. Fabbri, Henry Villard, James H. Banker, Calvin Goddard, Edward D. Adams, Frederick W. Foote, Jose F. de Navarro, Edward H. Johnson, and William H. Meadowcroft. At a meeting of the directors held on the 25th inst., the following officers were chosen: President, S. B. Eaton; vice-president, Edward H. Johnson; treasurer, E. P. Fabbri; secretary, Calvin Goddard. Executive committee—E. P. Fabbri, Grosvenor P. Lowrey, Edward D. Adams, Henry Villard and S. B. Eaton.

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[Written for the AMERICAN RAILROAD JOURNAL.]
The Transportation of Live-Stock from
the West.

A MODEL RESTING PLACE.

BELLOWS FALLS, Vt., Oct. 21, 1882.

HAVING some spare time in this place, and also having heard much about the stock-yards and feeding grounds on the line of the Cheshire Railroad at Cold River station one mile from this place, on the New Hampshire side of the Connecticut River the writer thought that a description of them would be of interest to the readers of the JOURNAL and the live-stock shippers who are unacquainted with their merits. A few remarks about the Cheshire Railroad, with which many are unfamiliar, will be of interest. This road, running from Bellows Falls in Vermont to Fitchburg, Mass., a distance of 65 miles, is an important short link in a long through line. It is fed by the Central Vermont and Grand Trunk roads, and is obliged to fight for its business against the line formed out of the first two roads with the Northern of New Hampshire and the Boston and Lowell. The Cheshire has for its Boston terminal the Fitchburg Railroad, who helps it in the struggle against its rival. This line has won a first-class reputation by the quick time it has made with stock trains, it having more than one record of bringing cattle from Chicago to Boston in four and a half days, and has sometimes made that time in the dead of winter, when the more southern routes were blocked with snow. It is proper to admit that this could not be done unless the executive ability was good which stood behind it; and the officers of the Cheshire alone have done no small part by their watchfulness and energy to contribute to the results quoted above. The road is managed by Mr. R. Stewart, who has aged with his charge, and who is assisted by J. W. Dodge, general freight agent, yet a young man, but who has been for many years in the road's employ, and whose eyes are open to the interests of his department. The offices of the above gentlemen are at Keene, N. H.

A great many cattle and horses from Canada, as well as from the west, come down this way to the Boston market, and it is profitable as well as humane to rest and recruit them, in order that they may appear well at the time of sale; and the great need, viz., that of a resting place and feeding ground near enough to Boston to have the cattle within easy call both for the markets and the European steamers, has been supplied in these Cold River grounds, as a train can be run from here to Boston in ten to twelve hours any time, the distance being only one hundred and thirteen miles. As one leaves the cars at this station, the first object to attract his attention is a long row of pens for hogs, ten in number, roofed in and capable of holding four hundred. These are built on a level with the cars, and each one contains a trough for water, and lanterns for use at night, as it is sometimes necessary to load them. Back of these, and reached by an easy decline from the railroad, are twenty-one pens for cattle, some of which have sheds covering a portion of them, and in all is brought pure spring water in pipes from springs on Fall

Mountain, at the base of which the yards lay. These springs are at the back or further side of the mountain, and the pipes bring the water one and a quarter miles—and such water! Many a city person pays a few cents per glass for spring water not half so good. The use of these yards may be judged from the fact that in times past, and before the dressed beef business had assumed its present proportions, one thousand one hundred cattle have been rested and fed here in a single week and 1,000 have been here at one time. Next to the cattle pens are the sheep-yards, and they are as near perfect as they well could be, comprising 7 fields of from 4 to 7 acres each, with a good growth of sweet grass and the same spring water spoken of before. These fields are well dressed and resown every year and yield a rich grass. Large numbers of sheep are fed here annually, there having been at certain seasons of the year as many as 2,700 at one time, and the total number in the twelve or thirteen years the yards have been opened must be enormous. The agent of the road, Mr. S. B. Green, a man well posted in his business, says that sheep fed in these succulent fields will gain five to six lbs. each in forty-eight hours. At times the capacity of the yards—and they occupy forty acres in all—are over-taxed and pasture land has to be hired for the surplus. The yearly average shows that twelve to fifteen hundred head of sheep per week are rested here. If the dumb brutes who tarry at this place on their long journey were possessed of an eye for beauty, they could but be impressed with their surroundings. The yards are located at the confluence of the Cold and Connecticut rivers, which are on the richest farming lands of New Hampshire, and are surrounded by lofty hills and mountains, presenting to the eye a beautiful picture. There is a hotel at this station of which agent Green is "mine host," and at which the drovers who travel in charge of the cattle are put up for a low price. The house is owned by the railroad; attached to it are several barns for storing hay and grain, the former being sold for \$1.35 per hundred lbs. In these barns are stalls for the horses which are rested here, and having accommodations for forty-two. Fifty cents per day is the charge for keeping them. One hundred tons of hay are often kept here at a time. The original cost of this property was \$20,000, and considerable money has been spent upon it since in the way of improvements. Cold River has become a sort of trading center for this part of the country, and all who have live-stock to dispose of resort here, and one falls in with some queer specimens of humanity, as well as many honest and genial "tillers of the soil." It is not uncommon to here meet men who have run stock to Boston for twenty-five or thirty years. Farmers living as far away as St. Lawrence county, New York, make up what is known to the trade as "succotash cars," one of which happened to arrive while the writer was looking the ground over, being composed of thirteen head of cattle, seventy-seven sheep, twenty hogs, and some ducks, turkeys and chickens. With this, the owner had "set sail," so to speak, for Cold River and a market; which means that, if he could not sell out to advantage anywhere else he

would go through to the Union markets at Watertown, near Boston. As one looks these feeding-yards over, he can but be impressed with their value as a refreshment place for stock in transit; and the expense of stopping there is so little, that the writer thought that the many readers of the JOURNAL would be interested to peruse a description of them. Knowing that all matters pertaining to the transportation of live-stock are of interest to railroad men, the foregoing is submitted by—

"Curtis."

The Philadelphia and Reading Railroad Company's shops are turning out freight cars at the rate of ten a day.

The Southeastern Railway Company have leased the Montreal and Sorel Railway for twenty-one years, giving the latter company 40 per cent. of the gross earnings.

Of the \$474,916,368.50 of cotton goods manufactured in Great Britain last year, \$384,866.118.50 was exported, of which \$257,245,440 represents the value of piece goods.

THE Georgia Pacific Railroad has been provided with steel rails for sixty miles between Atlanta and Anniston. Within eighteen months the projectors expect to run trains from Atlanta to Columbus.

The Committee on Securities of the New York Stock Exchange has ruled that in addition to the present call of Louisiana consolidated bonds carrying all unpaid coupons, they shall also be called exclusive of all matured coupons.

THE Pittsburgh Post says that the Pittsburgh and Youghiogheny Railroad Co. have purchased the West Yough Branch of the Baltimore and Ohio Railroad Co. for which said company gets \$300,000, or 4½ times its original cost. The road is about five miles long.

THE Philadelphia and Reading Railroad Company have received 24 of the 30 coal-dirt burning locomotives lately ordered of the Baldwin Locomotive Works. The other six will be finished next month. Six hundred tons of coal-dirt per day is being utilized by the company as fuel.

The relative cost of producing a pound of print cloth, which includes wages, sundry expenses, rent, interest and depreciation of machinery, as figured out by a British spinner in 1876, was as follows: In Lowell, 13.72 cents; Fall River, 4.13; Rhode Island, 11.99; Pennsylvania, 15.59. England, 12.16.

THERE are \$52,000,000 invested in mining operations on the Menominee and Marquette iron ranges, Michigan, and about fourteen thousand miners are employed. Take this industry with the lumber interests and the upper peninsula will show nearly if not quite as big a business record as the lower section of the State south of Mackinac Straits.

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Leavitt's Patent Elevated Cable Street Railway.

THE object of this invention is to at once dispense with the track on the pavement; also the use of horses, or any kind of Dummy or Locomotive in the street. Any or all of which are not very desirable in important business streets or thoroughfares. *By this Patent the desired objects are accomplished.*

For the Lower Route or Local Travel the trucks are run on an elevated track, and the cars are suspended under the truck, the bottom of the passenger cars coming within about one foot of the pavement. The cars can be stopped or started at any time by the brakeman. They will turn curves at any angle desired. The cars pass down one track and up the other by means of an endless steel wire cable and stationary steam-engine, located in the station-house at the center or end of the route.

Any number of cars may be run either way at the same time. The cars and trucks will be much lighter than ordinary street cars to carry the same number of passengers, as the trucks will be run on light steel rails.

The second or upper line will be constructed on top of the lower line, and operated in the same way, with the exception that the cars will be run above the upper track.

The upper line will be for quick transit and through travel, and cars can be run at any speed desirable, with *perfect safety*, as both the upper and lower lines will be built with a substantial channel bar of wrought iron, riveted firmly to the truss-work immediately over the wheels, which will prevent the possibility of the wheels jumping the track under any circumstances.

When either line is to be built, the truss-work can be constructed so as to admit of the second with comparatively small expense, without the least additional obstruction to the street.

The above Railway line can be built with truss-work extending from curb to curb, sufficiently high to be out of the way of all ordinary business in the street, so when the cars have passed a given point the street will be perfectly free from all obstructions, and people residing on the line of this Railway will not be disturbed by the noise of horses, locomotive, dummy, or any long train of cars, as the cars will always be run single and will make but very little noise, excepting a small alarm bell, which will always ring whenever the cars are in motion.

This Railway may be built single or double, according to the business requirements of the street. Either or both lines will be operated, independent of each other, under said *Leavitt's Patent*, dated December 17th, 1878, and September 19th, 1882.

Some of the advantages gained by the use of this Railway:

In the first place you dispense with the large horse stables at the station house, a thing that is always very disagreeable to the vicinity, and only tolerated when unavoidable.

By substituting the Cable Railway in place of horse cars, you will have no stables at all, and in place of the ordinary car house you can have an elegant four-story business house; the first

story for the use of the Company's Main Office and Waiting Rooms in front, in the center a large room for storing cars, with engine and machinery in the rear, one or two hundred feet from the street, all of which can be kept in perfect order. The three upper stories will be desirable property for rent.

The property owners along the line of this Railway will have, instead of the clumsy rumbling horse cars, an elegant Street Railway, that will be at once an ornament to the street and a pleasure to all who wish to travel on the street, either by cars or otherwise. The horse car tracks can all be removed from the street, and the pavement left as smooth and clear as it was before any street cars were ever used. This Cable Railway will be elevated about eighteen feet above the pavement, completely out of the way of all ordinary street traffic. It will be light, airy and elegant when properly built and painted as it should be.

A person walking on either sidewalk can see all the buildings on the opposite side of the street. In fact, the truss-work will be so open that you can see everything on the street just as well as you could if there were no railway. The columns will set inside the curb stones, all excepting the center line, which will be exactly in the center of the street, leaving the street entirely free to the public on both sides of the center after the cars have passed any given point. The columns in the center will be thirty feet apart, or more if desirable, so that teams or carriages can pass from one side to the other of the street without the least obstruction. Not so with horse car tracks in the street. With them it is very difficult to pass from one side of the street to the other with a loaded team, or even with any light carriage, as there are and always will be large ruts on each side of the rails, which are very liable to spring the axles or wheels, and extremely dangerous to pass over.

The Cable Railway, besides being ornamental to the street, will be found very useful in many respects, independent of being one of the most delightful and safe ways of traveling that was ever invented. The cars will run so still that a person could write a letter when the car is under full headway. There will be no rumbling noise like horse cars, as there are no wheels under the cars or anything else to make any noise at all. People going to or from their business, or those riding for pleasure, can converse as pleasantly as they could in their office or parlor at home. When you get into this car you only have one step from the ground.

The roof and windows will be somewhat higher than ordinary horse cars, which will give better light and ventilation. There are also many other advantages of great value to the citizens of the street where this railway is to be used. The day of telephone and electric light is at hand. By using this Cable Railway you can dispense with not only the horse cars and their inconveniences, but do away with the unsightly and irregular string of lamp posts, hitching posts and telegraph poles which are strung along over streets without regard to order or beauty, and have in their place elegant wrought iron columns every thirty feet, perfectly on a straight line, thus forming a beautiful

colonnade the whole length of the street on both sides.

As often as hitching posts are needed you can drill into any of the columns and attach a ring for hitching places. Instead of ordinary lamp posts, the gas pipes may be taken to the center of the Railway Truss Work and light the street from the center, thereby reflecting the light both ways from the center of the street, which will light the street much better than from the sides, as they are now compelled to do. The time is close at hand when about every family on all principal avenues will want a telephone. With this Railway all can be accommodated, as there will be an abundance of room on the top of the truss work to carry five hundred wires, and each family can have a wire from any place to their home, and from there to office, and have a safe place for their wires with very little cost compared with setting any kind of posts.

Instead of having the street lighted with gas, it should be lighted by electricity, the wires being placed on the center of the railway truss and dropping below the top like a chandelier in a parlor. The whole street as well as the station-house should be lighted with electricity, and the effect would be grand.

Any person wishing further information can address Charles Leavitt, 18 Diamond Park, Cleveland, O.

[The Daily Citizen, Ottawa, Oct. 4.]

APPOINTMENT.—Mr. James J. White has been appointed to the charge of the Canadian department of the AMERICAN RAILROAD JOURNAL, of New York, the oldest-established journal of the kind in the world. Mr. White is a gentleman of well-known ability, and in securing his services our American cousins have acted wisely.

THE world is full of advertising; yet every one wants to see what is new.

THE car on the New York division of the Pennsylvania Railroad into which the electric light was recently introduced with success has been put into regular service. Arrangements are being made to light other cars in the same way.

THE following is the process for water-proofing canvas, and woven fabrics generally: The fabric is taken successively through baths of sulphate of alumina, and soap and water. The common sulphate of alumina of commerce (called concentrated alum cake) answers very well for the first bath. It readily dissolves in cold water, to the extent of 1 part in 10 parts of water. The three baths of alumina, salt, soap and water should be arranged side by side, so that the canvas may be passed from one to the other. The soap bath should be kept hot, and some arrangement should be devised to keep the stuff down in the bath while being passed through. The fabric should be thoroughly soaked in alumina bath. The theory of the operation depends on the formation of an insoluble alumina soap which adheres to the fiber of the fabric, and which is water-repellant. The goods so treated are left quite pervious to air, but will resist water.—*Painters' Magazine*.